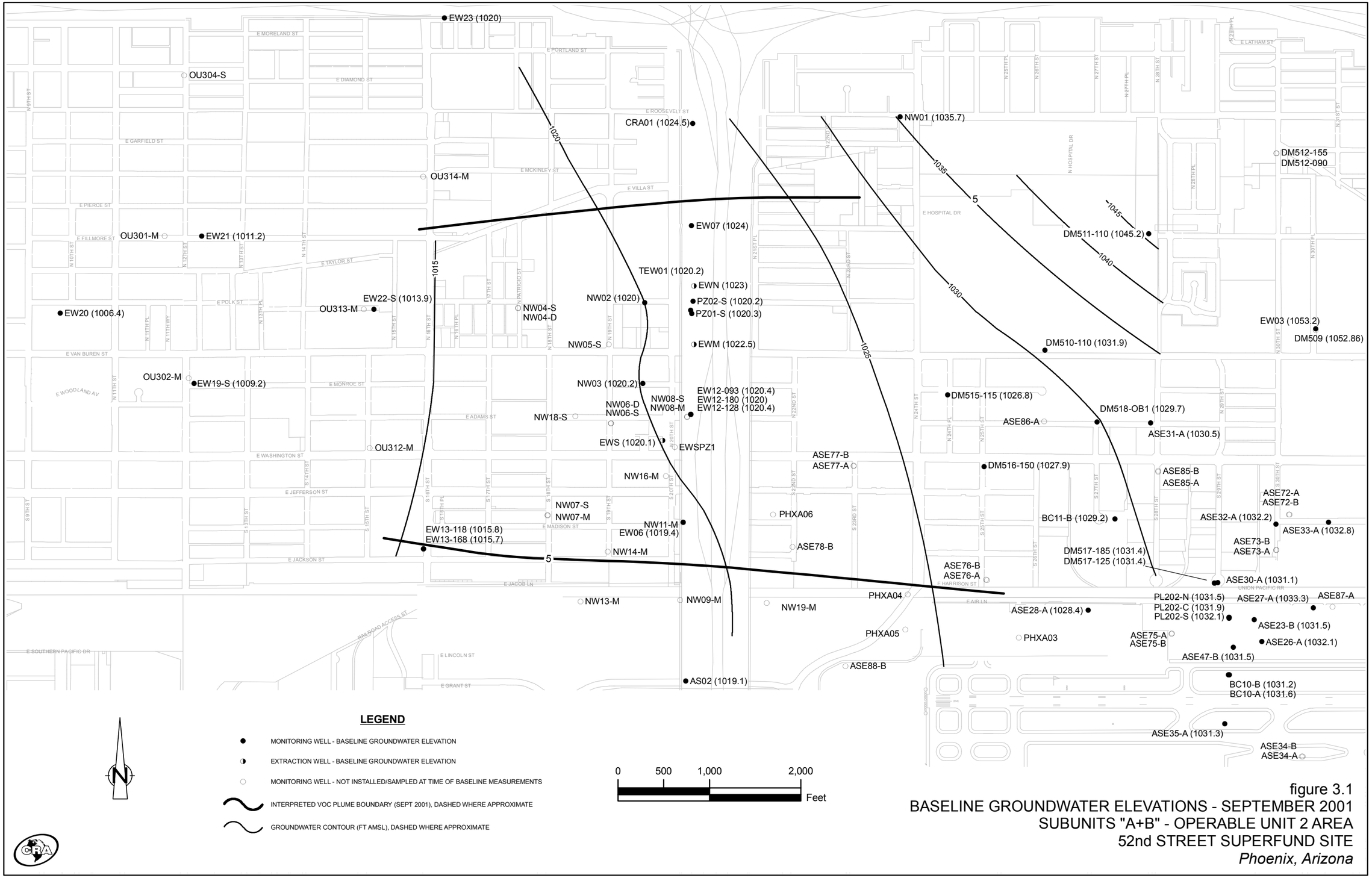


figure 3.1
BASELINE GROUNDWATER ELEVATIONS - SEPTEMBER 2001
SUBUNITS "A+B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA010_Fig3-1

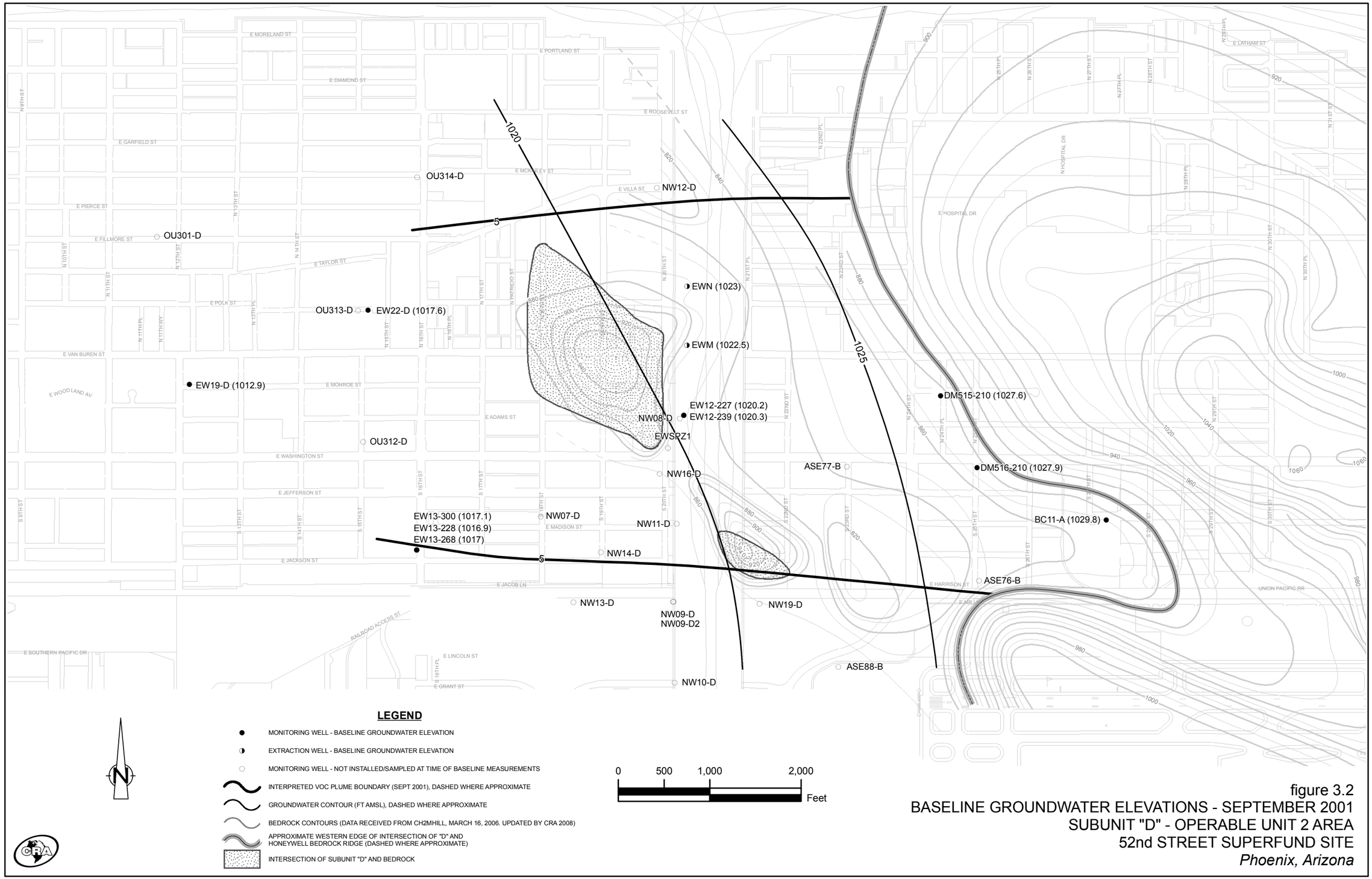


figure 3.2
BASELINE GROUNDWATER ELEVATIONS - SEPTEMBER 2001
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA011_Fig3-2

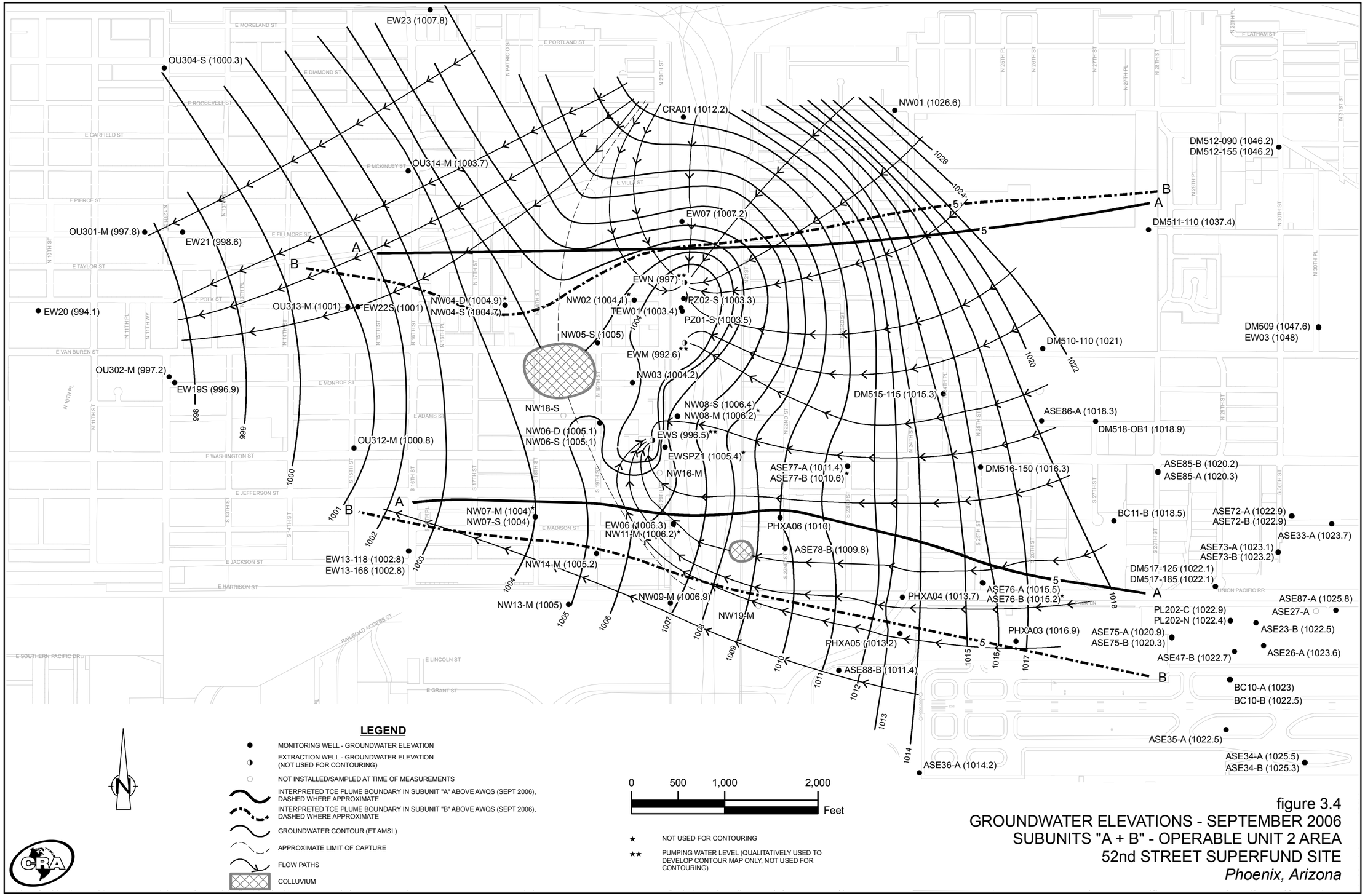


figure 3.4
GROUNDWATER ELEVATIONS - SEPTEMBER 2006
SUBUNITS "A + B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA013_Fig3-4

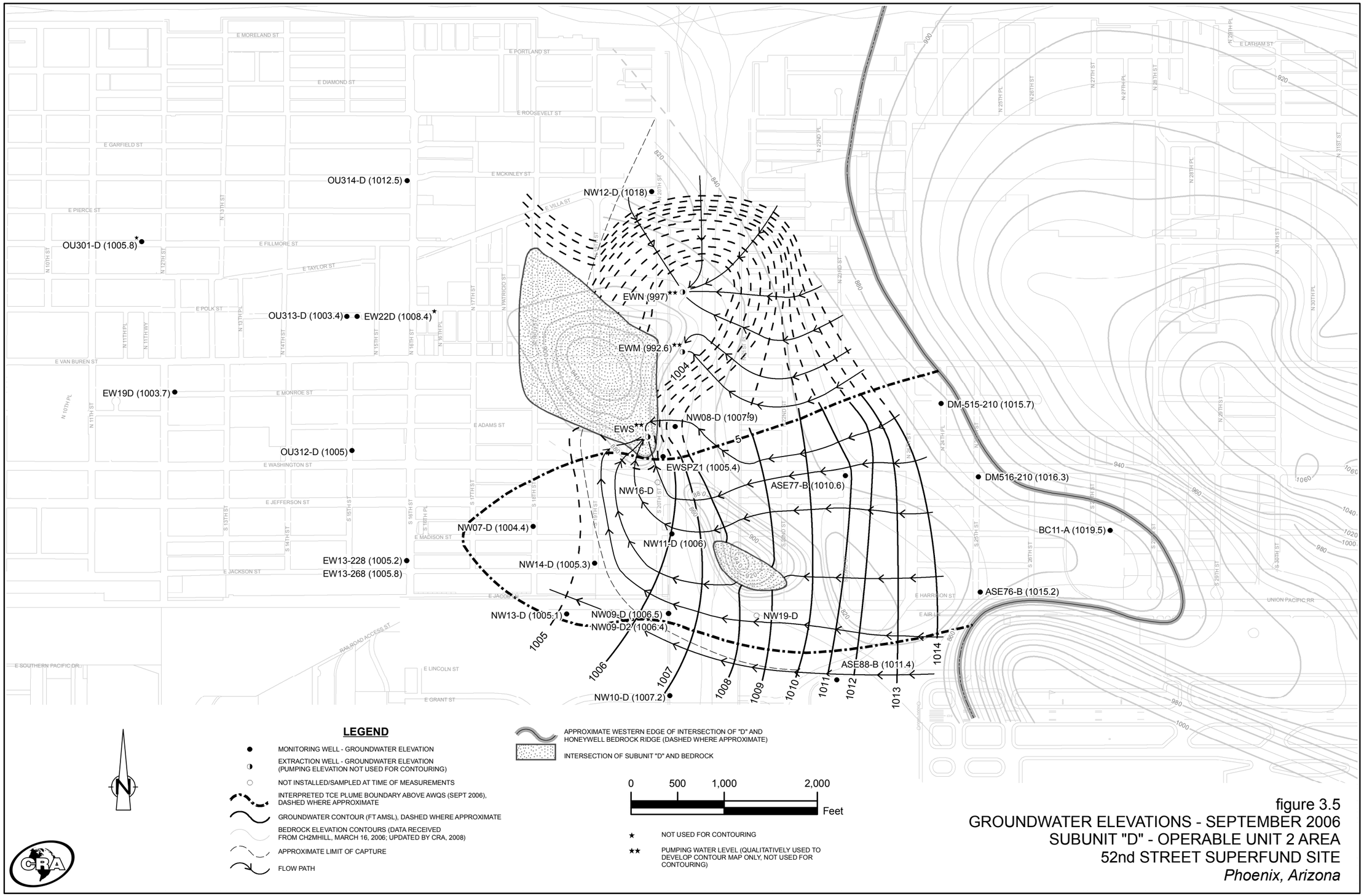


figure 3.5
GROUNDWATER ELEVATIONS - SEPTEMBER 2006
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA014_Fig3-5

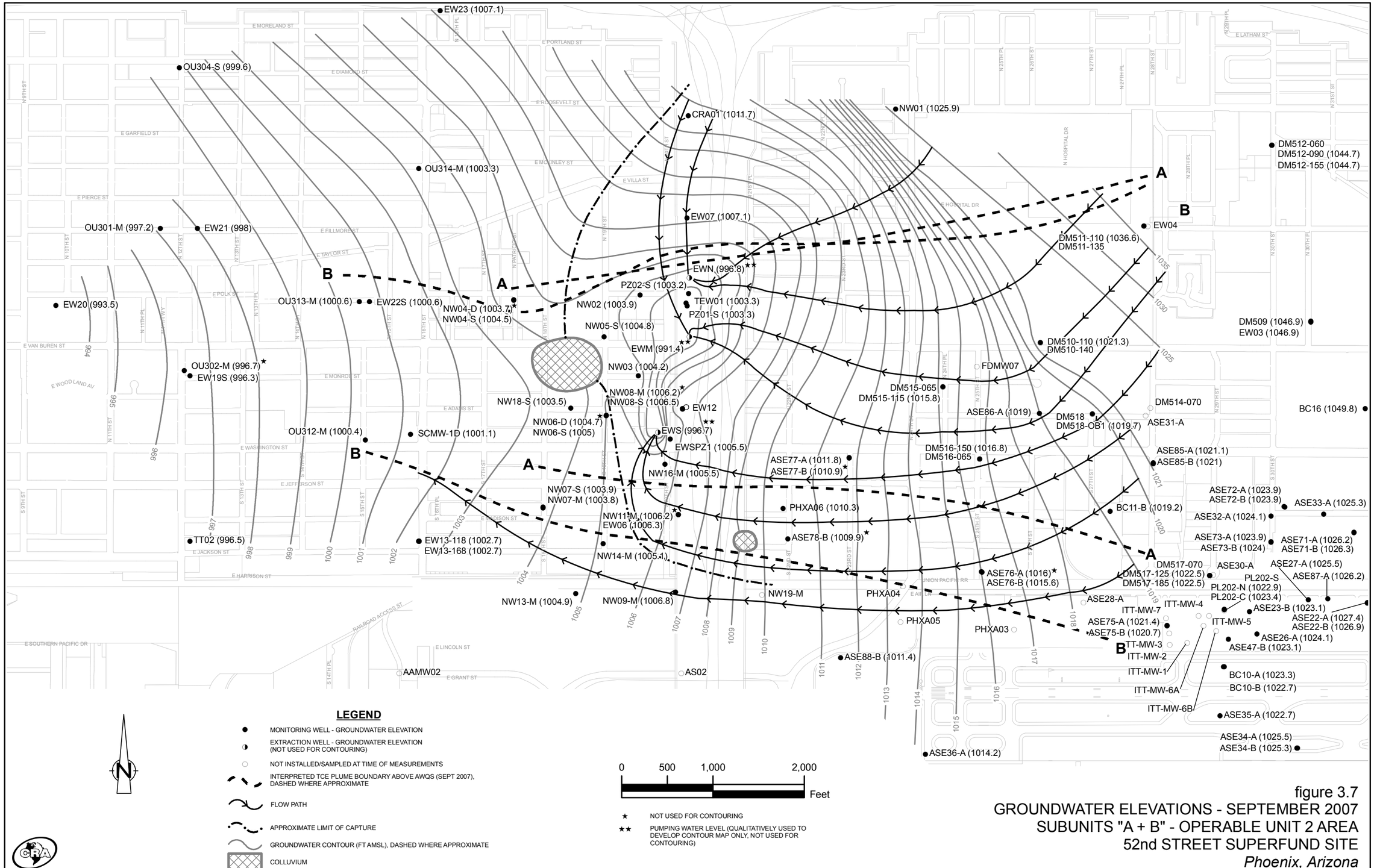


figure 3.7
GROUNDWATER ELEVATIONS - SEPTEMBER 2007
SUBUNITS "A + B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA016_Fig3-7

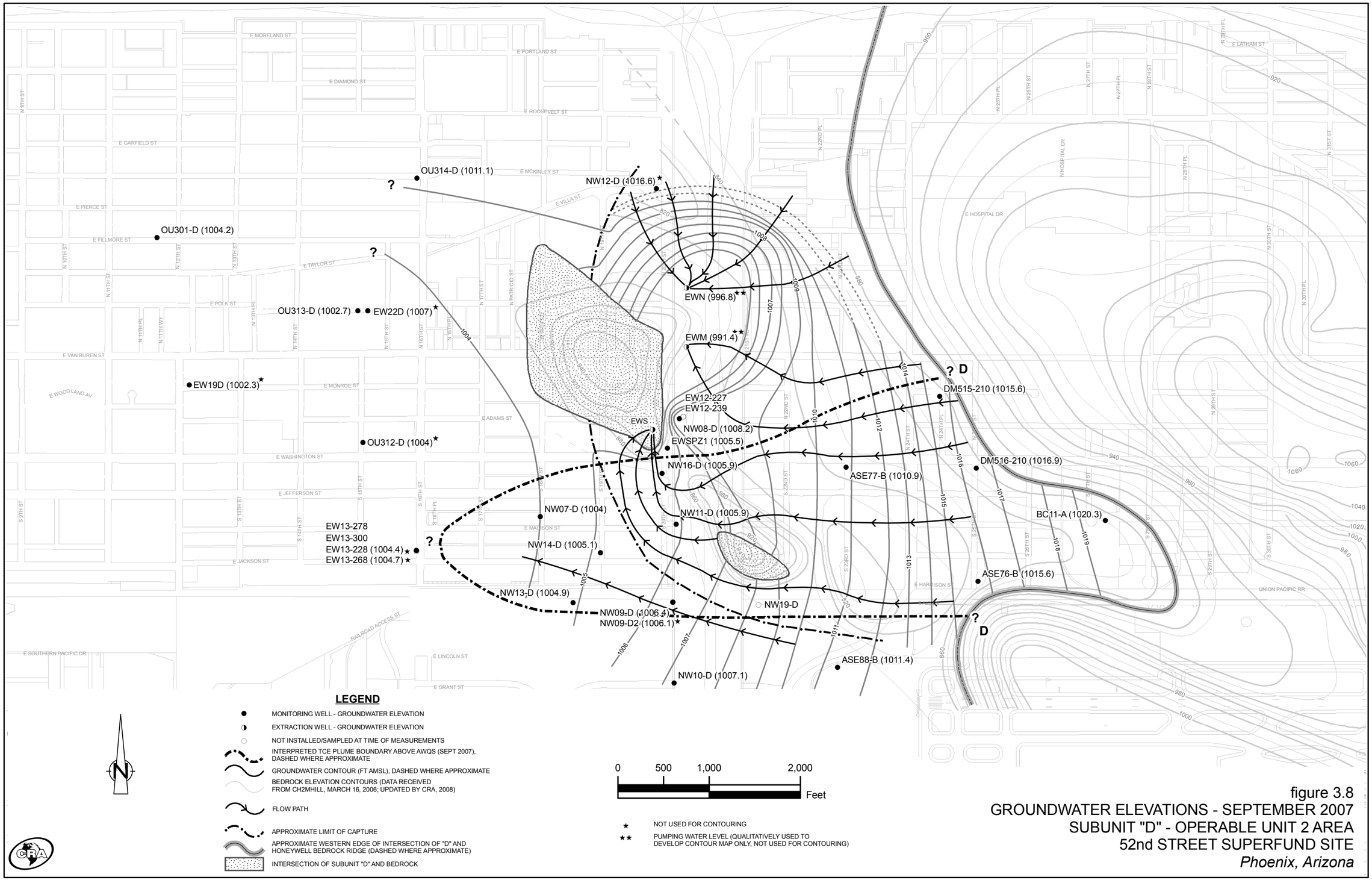


figure 3.8
GROUNDWATER ELEVATIONS - SEPTEMBER 2007
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA017_Fig3-8

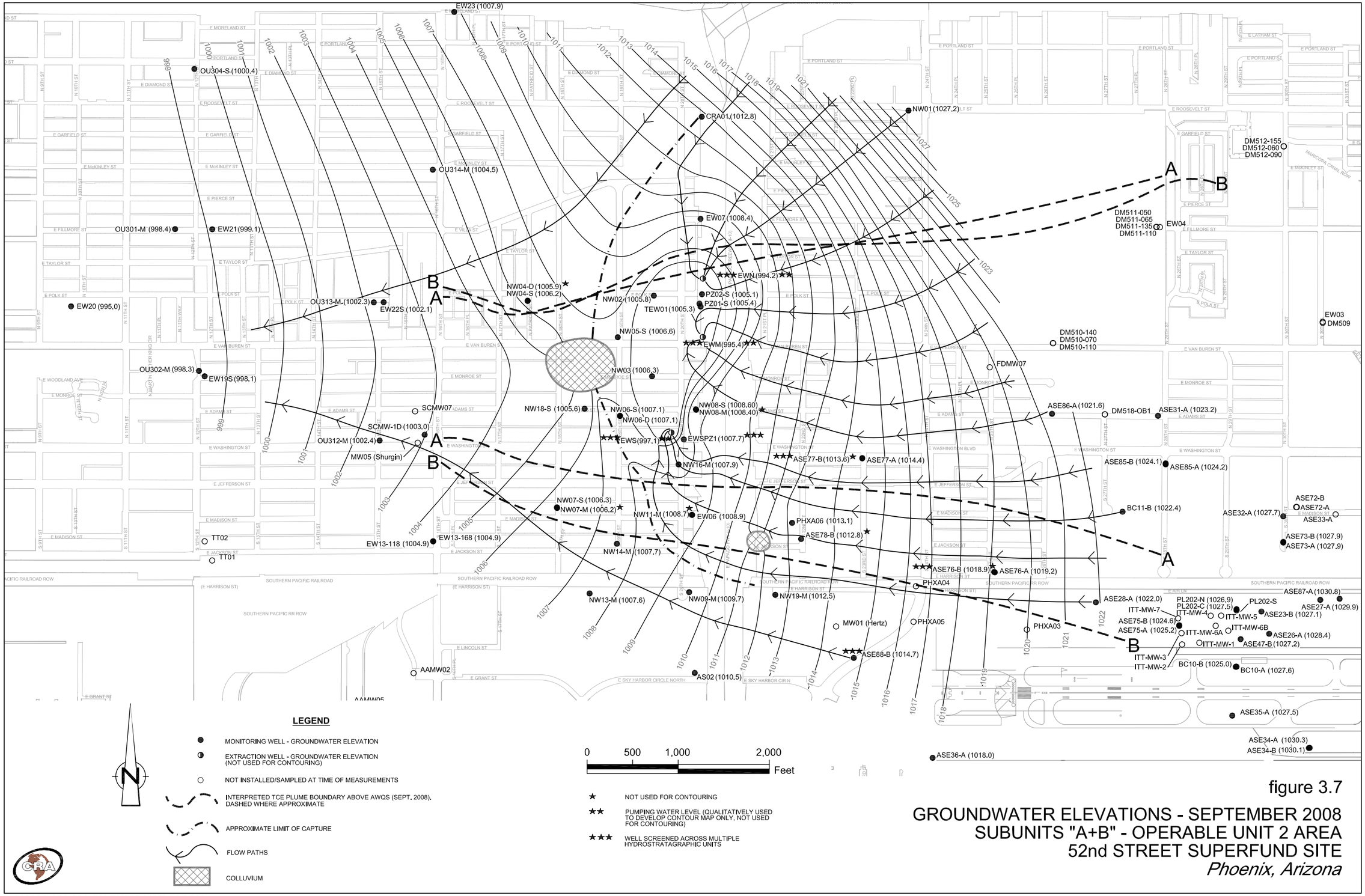


figure 3.7

GROUNDWATER ELEVATIONS - SEPTEMBER 2008
SUBUNITS "A+B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GN-PX005 MAR 13/2009

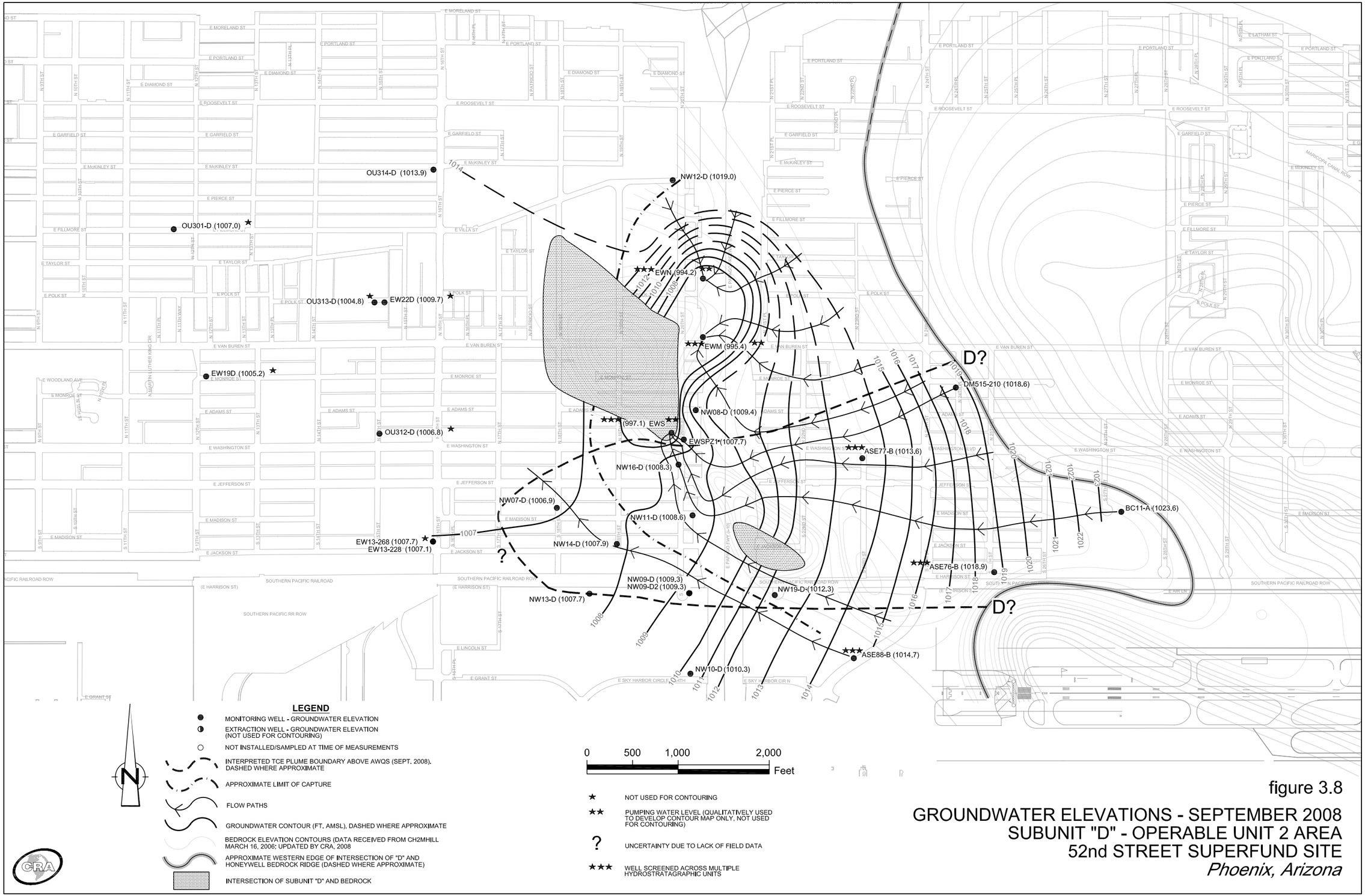


figure 3.8

GROUNDWATER ELEVATIONS - SEPTEMBER 2008
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GN-PX007 APR 13/2009

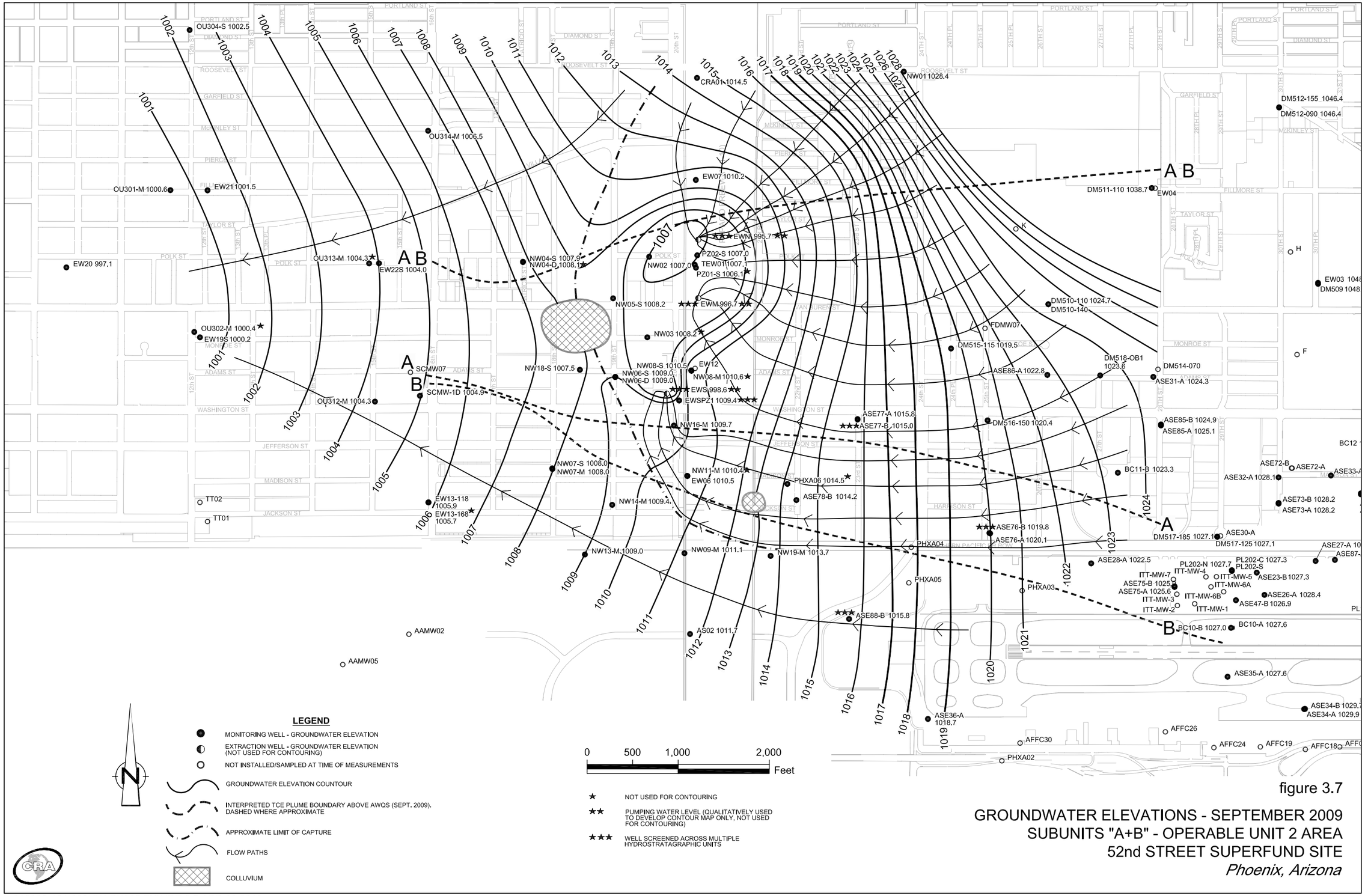


figure 3.7

GROUNDWATER ELEVATIONS - SEPTEMBER 2009
SUBUNITS "A+B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX005 FIGURE 3.7 APR 08/2010

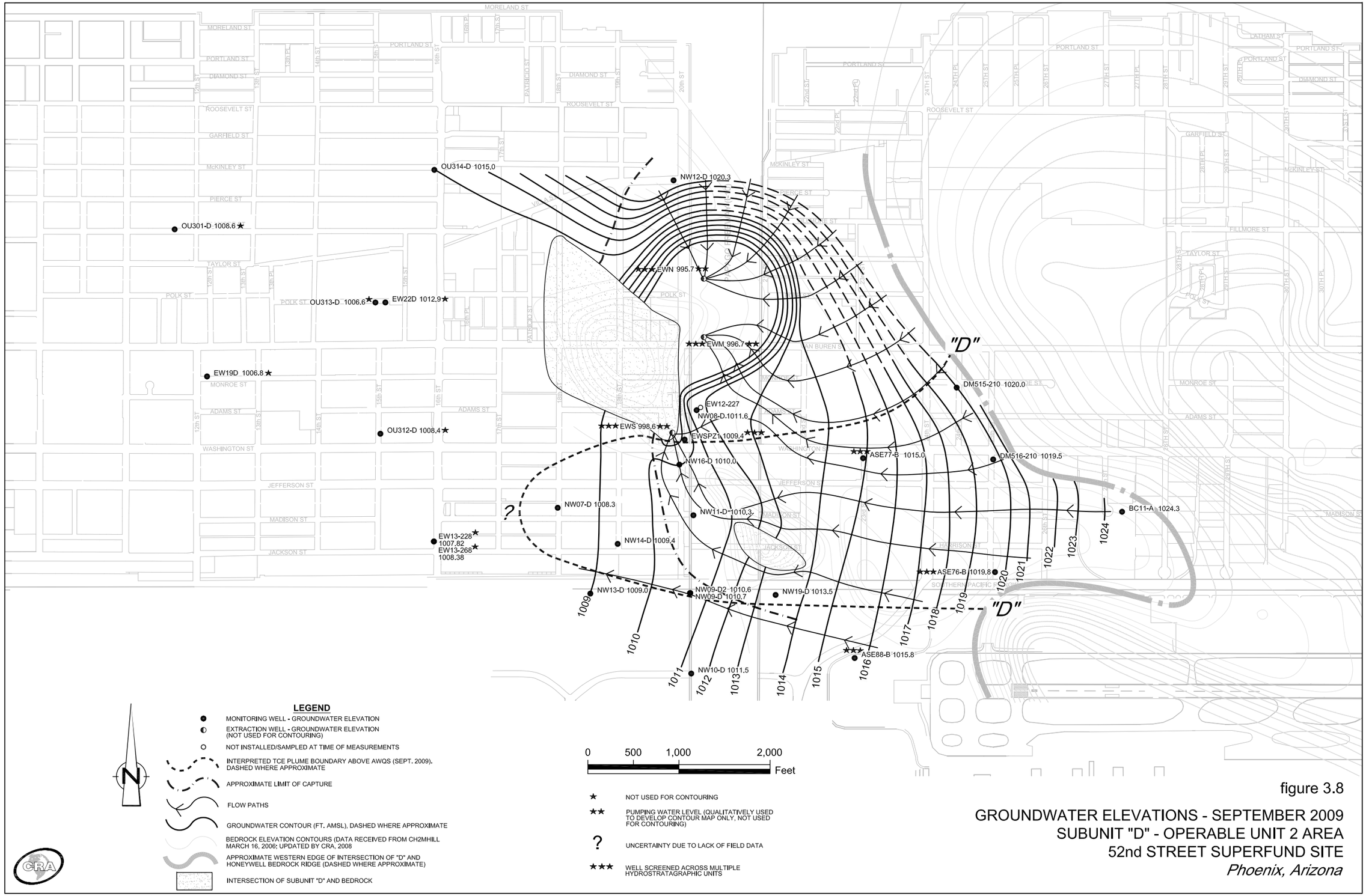


figure 3.8

GROUNDWATER ELEVATIONS - SEPTEMBER 2009
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX006 FIGURE 3.8 APR 15/2010

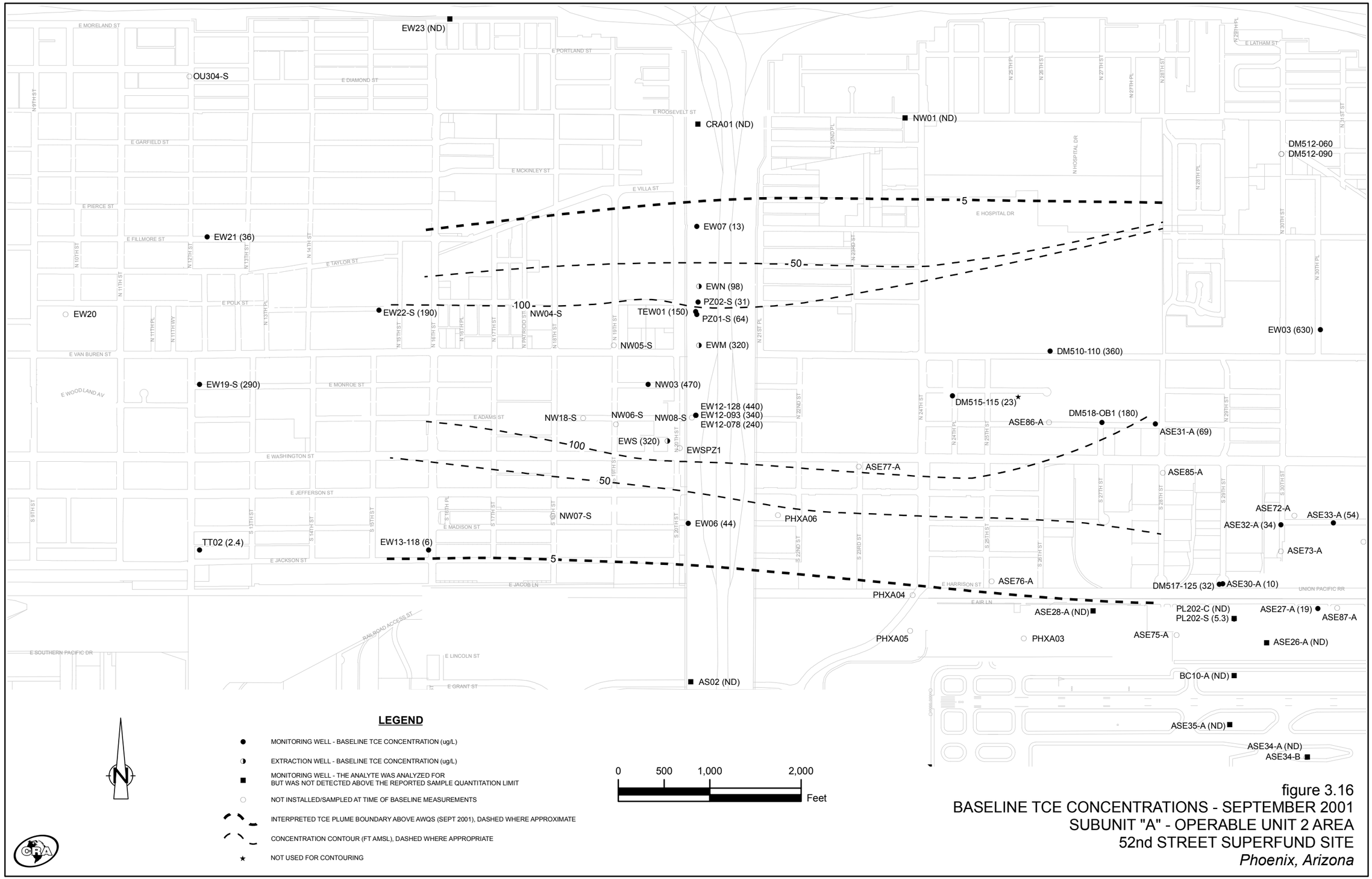
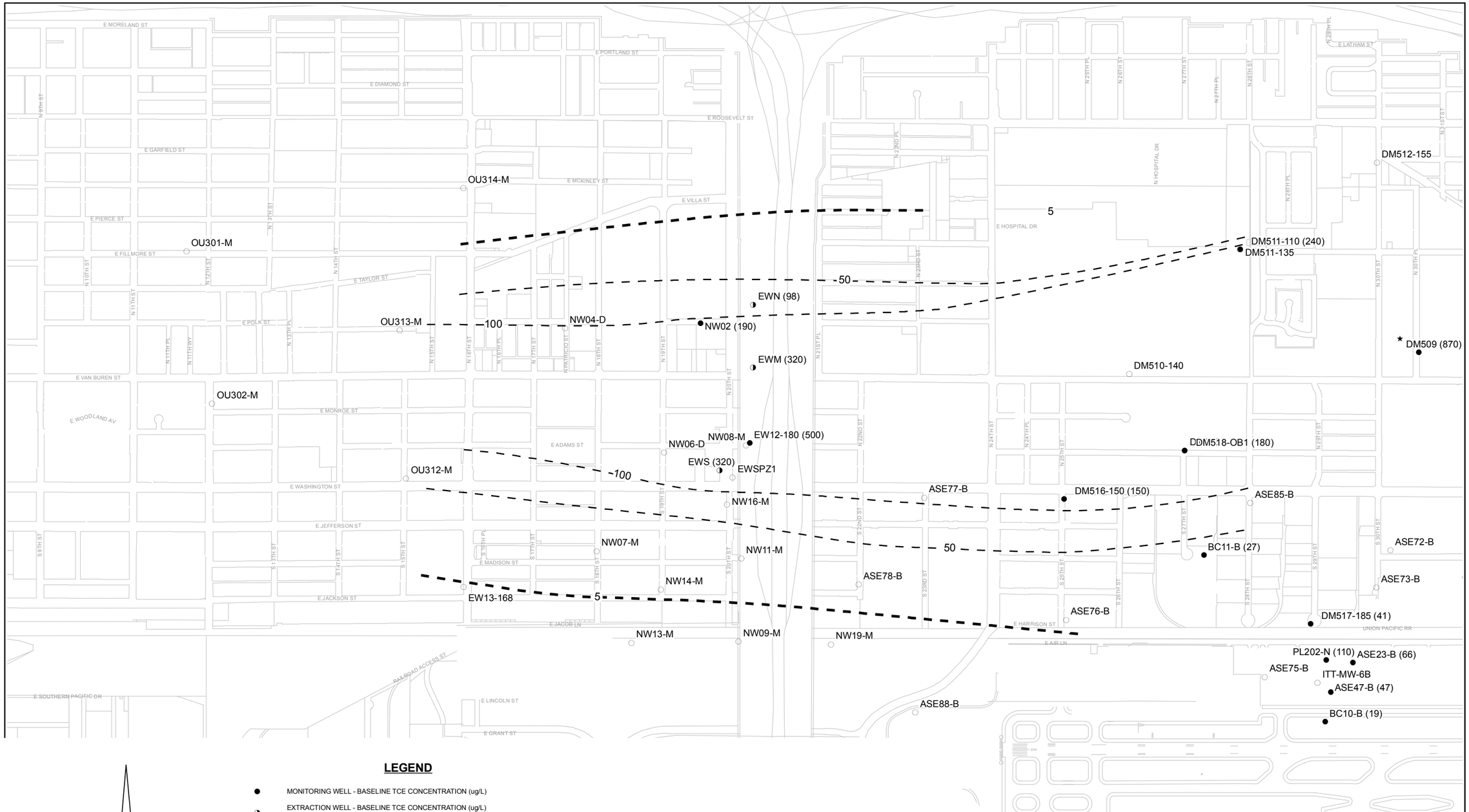


figure 3.16
BASELINE TCE CONCENTRATIONS - SEPTEMBER 2001
SUBUNIT "A" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA023_Fig3-16



LEGEND

- ● MONITORING WELL - BASELINE TCE CONCENTRATION (ug/L)
- ◑ EXTRACTION WELL - BASELINE TCE CONCENTRATION (ug/L) (PUMPING ELEVATION NOT USED FOR CONTOURING)
- ■ MONITORING WELL - THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
- ○ MONITORING WELL - NOT INSTALLED/SAMPLED AT TIME OF BASELINE MEASUREMENTS
- INTERPRETED TCE PLUME BOUNDARY ABOVE AWQS (SEPT 2001), DASHED WHERE APPROXIMATE
- CONCENTRATION CONTOUR (FT AMSL), DASHED WHERE APPROXIMATE
- ★ DATA COLLECTED OCTOBER 2001

figure 3.17
BASELINE TCE CONCENTRATIONS - SEPTEMBER 2001
SUBUNIT "B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA024_Fig3-17

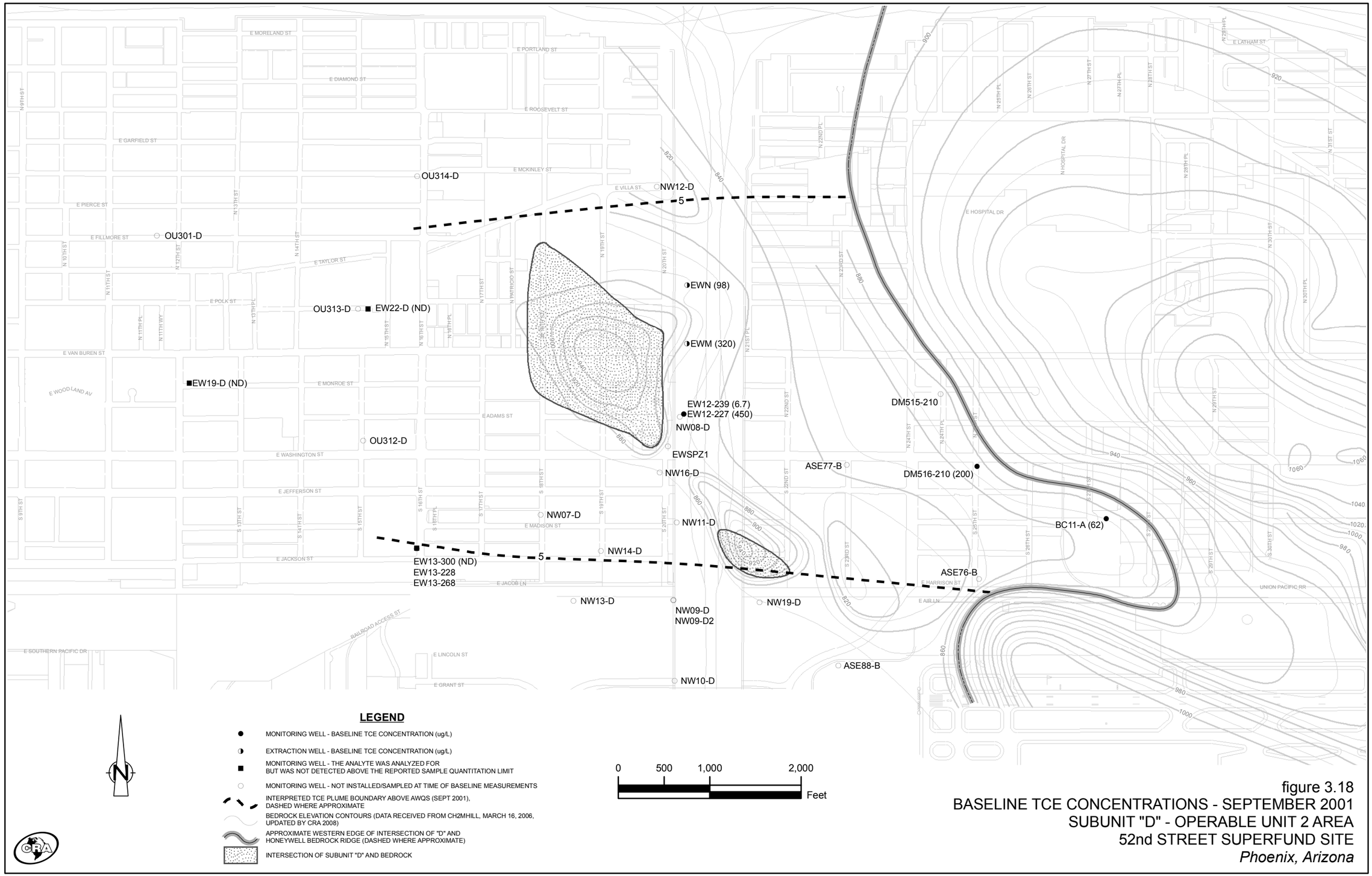


figure 3.18
BASELINE TCE CONCENTRATIONS - SEPTEMBER 2001
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA025_Fig3-18

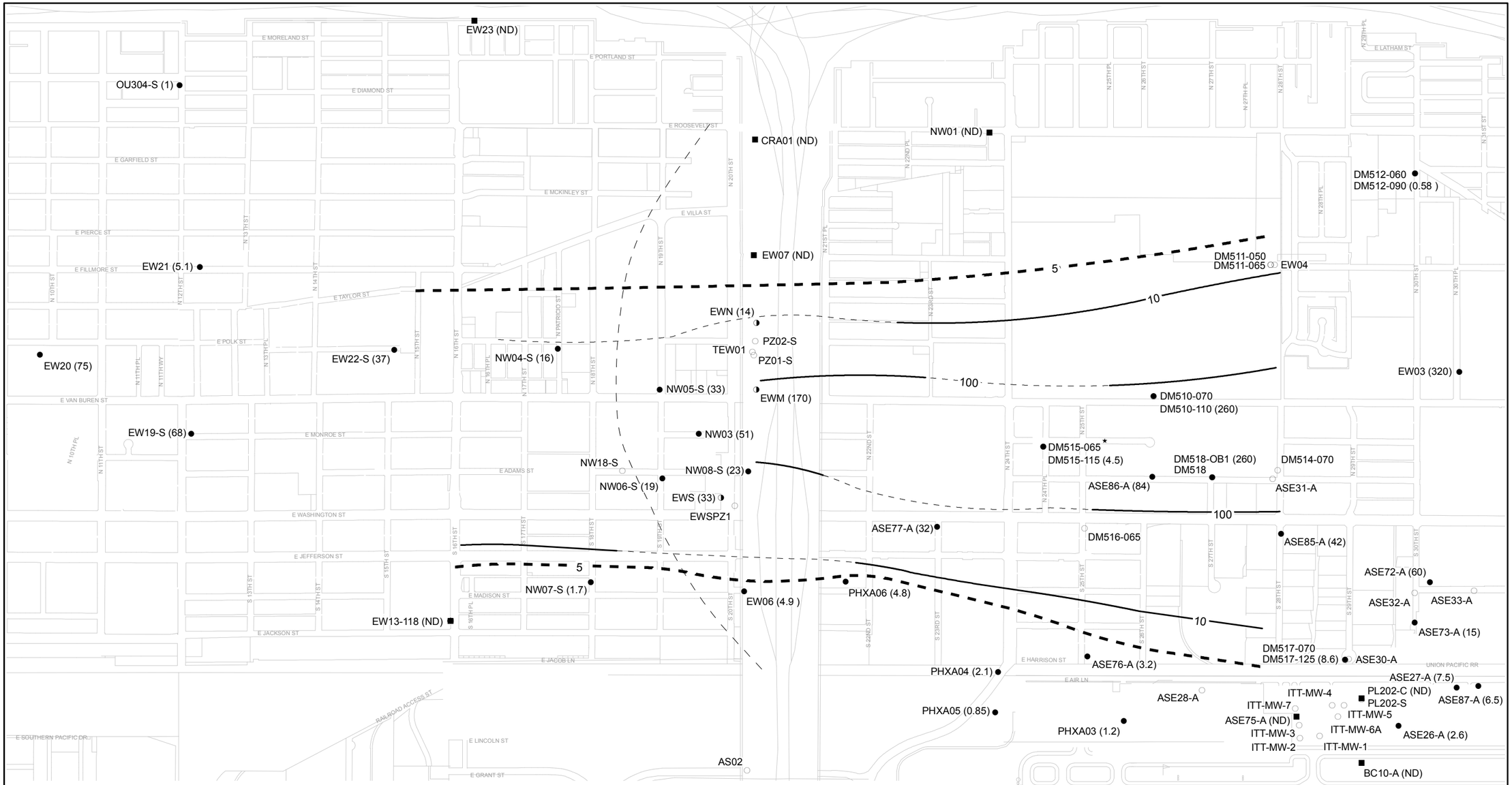


figure 3.20
TCE CONCENTRATIONS - SEPTEMBER 2006
SUBUNIT "A" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

13932-151(020)GIS_WA020_Fig3-20

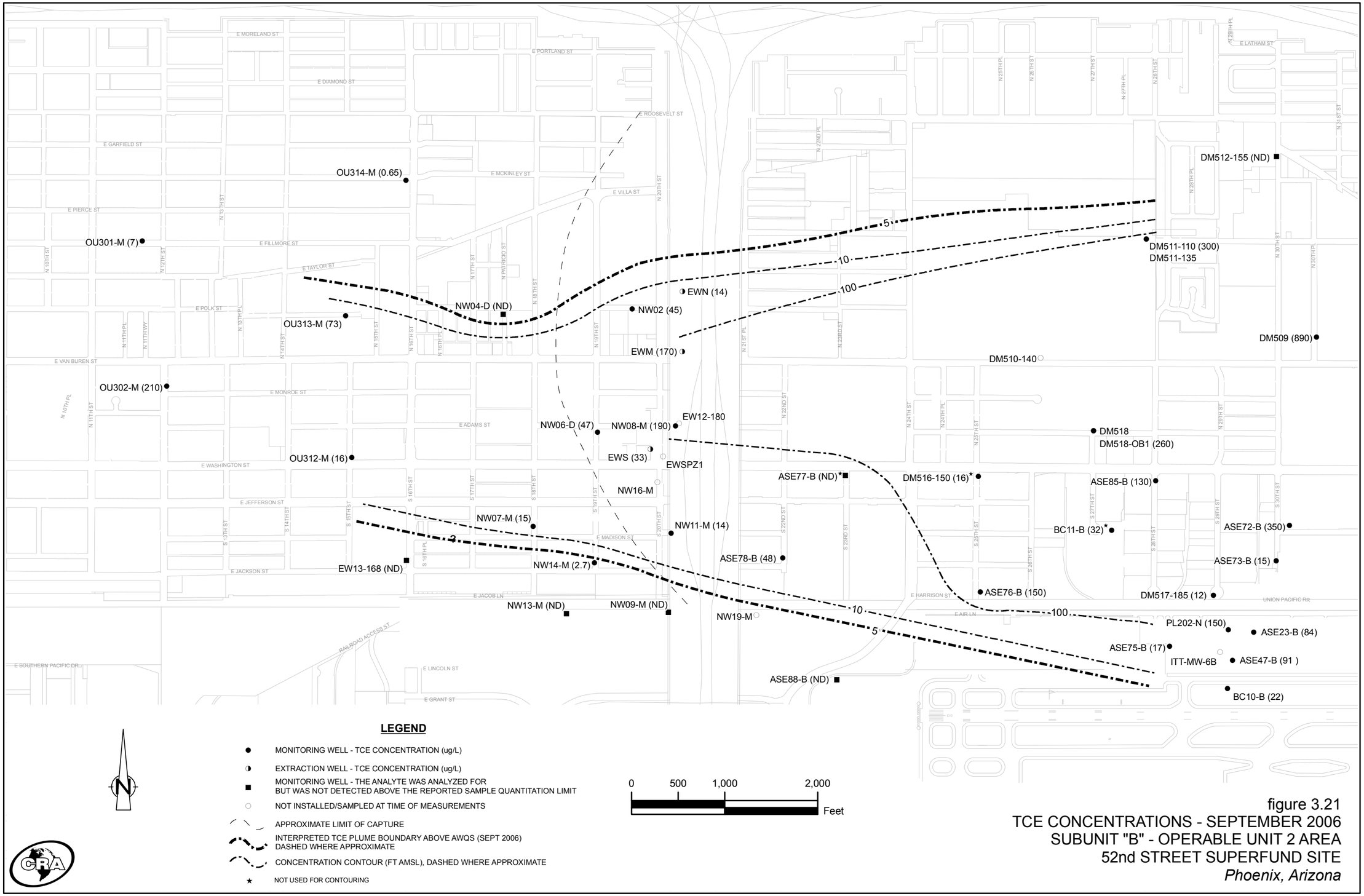


figure 3.21
TCE CONCENTRATIONS - SEPTEMBER 2006
SUBUNIT "B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS_WA028_Fig3-21

LEGEND

- ● MONITORING WELL - TCE CONCENTRATION (ug/L)
- ◑ EXTRACTION WELL - TCE CONCENTRATION (ug/L)
- ■ MONITORING WELL - THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
- ○ NOT INSTALLED/SAMPLED AT TIME OF MEASUREMENTS
- INTERPRETED TCE PLUME BOUNDARY ABOVE AWQS (SEPT 2006), DASHED WHERE APPROXIMATE
- CONCENTRATION CONTOUR (FT AMSL), DASHED WHERE APPROXIMATE
- BEDROCK ELEVATION CONTOURS (DATA RECEIVED FROM CH2MHILL, MARCH 16, 2006)
- APPROXIMATE LIMIT OF CAPTURE
- APPROXIMATE WESTERN EDGE OF INTERSECTION OF "D" AND HONEYWELL BEDROCK RIDGE (DASHED WHERE APPROXIMATE)

N

0 500 1,000 2,000 Feet

★ NOT USED FOR CONTOURING

figure 3.22
TCE CONCENTRATIONS - SEPTEMBER 2006
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS_WA029_Fig3-22

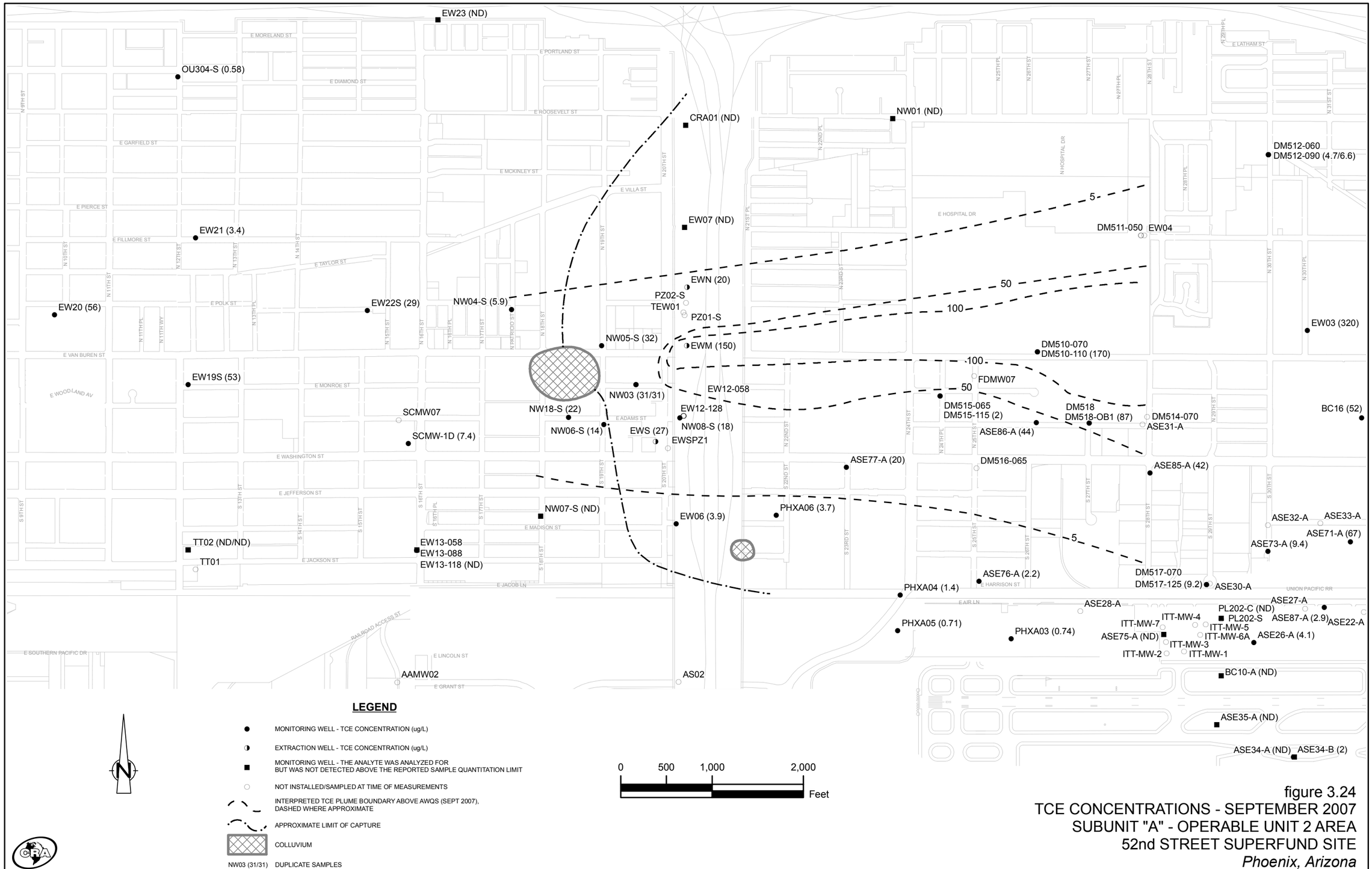


figure 3.24
TCE CONCENTRATIONS - SEPTEMBER 2007
SUBUNIT "A" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA031_Fig3-24

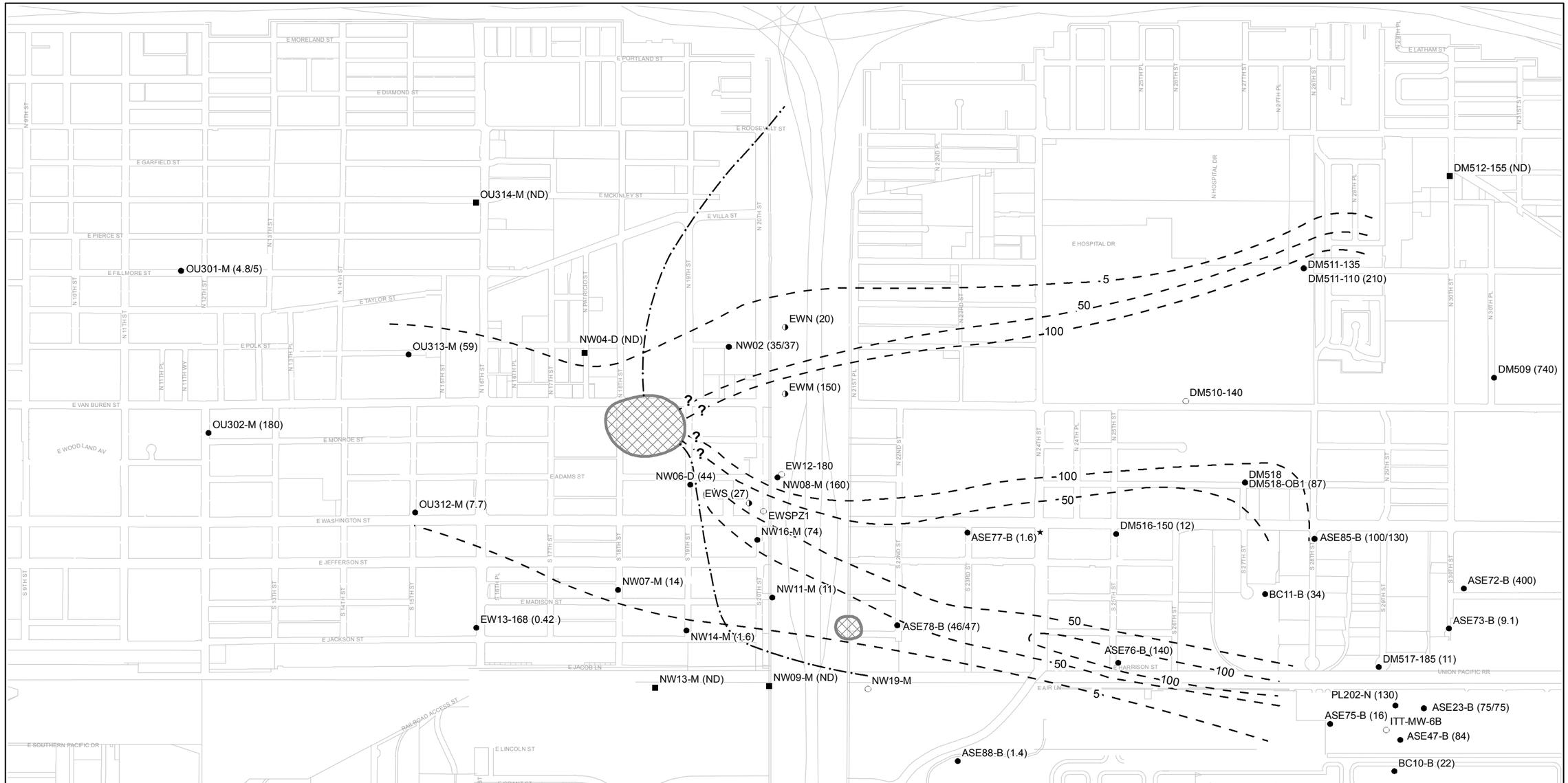


figure 3.25
TCE CONCENTRATIONS - SEPTEMBER 2007
SUBUNIT "B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA032_Fig3-25

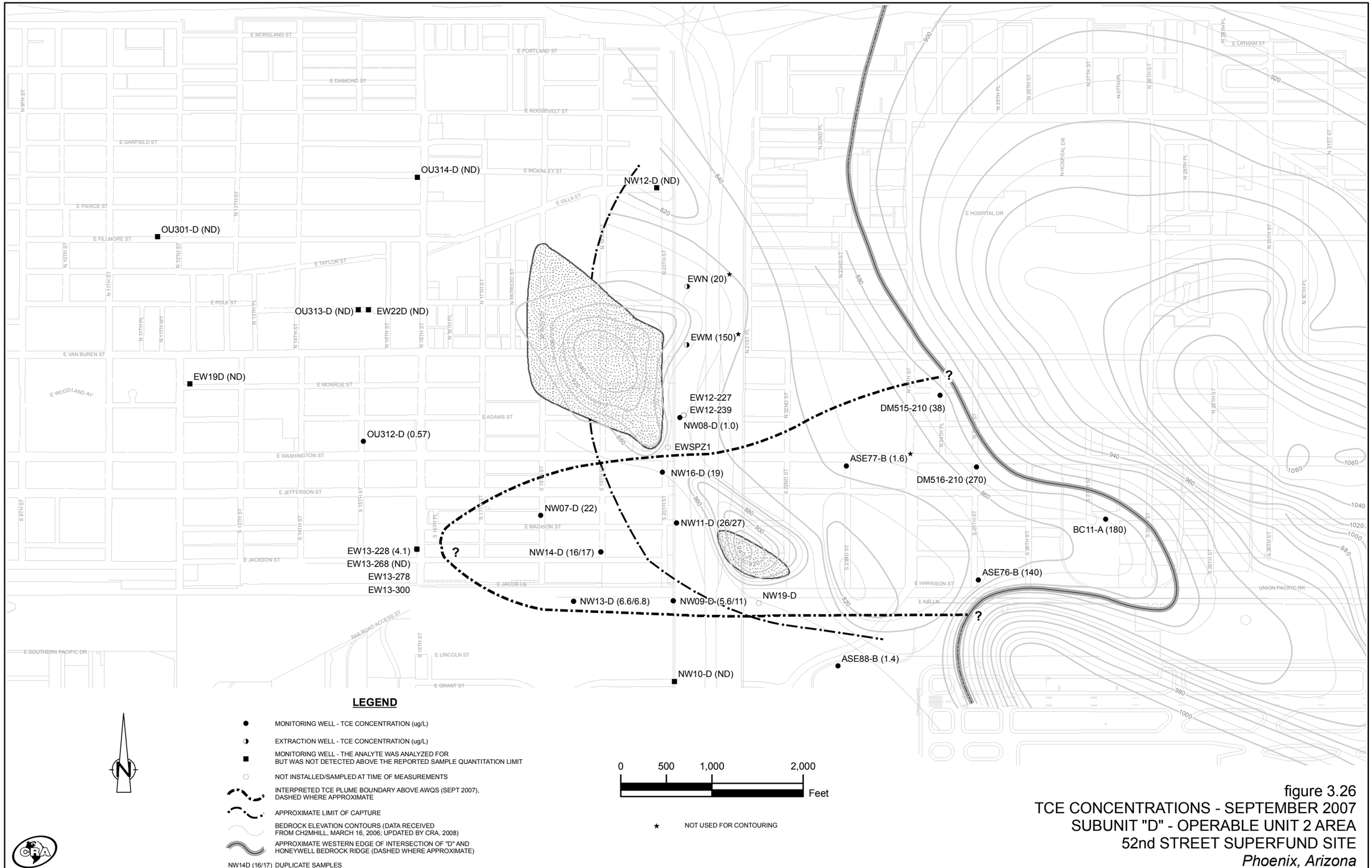


figure 3.26
TCE CONCENTRATIONS - SEPTEMBER 2007
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA033_Fig3-26

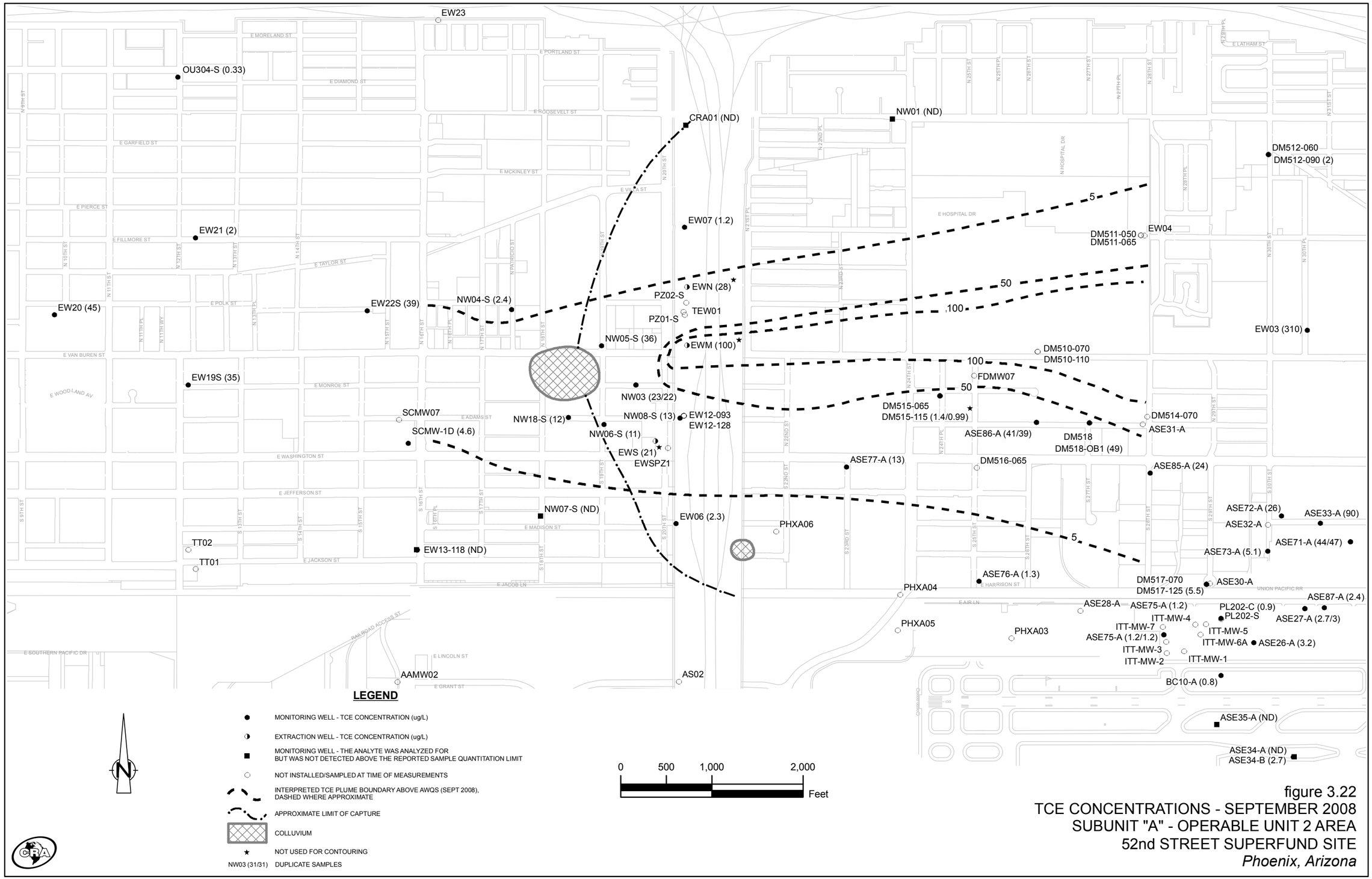


figure 3.22
TCE CONCENTRATIONS - SEPTEMBER 2008
SUBUNIT "A" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GIS-WA031_Fig3-22

figure 3.23
TCE CONCENTRATIONS - SEPTEMBER 2008
SUBUNIT "B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GIS-WA032_Fig3-23

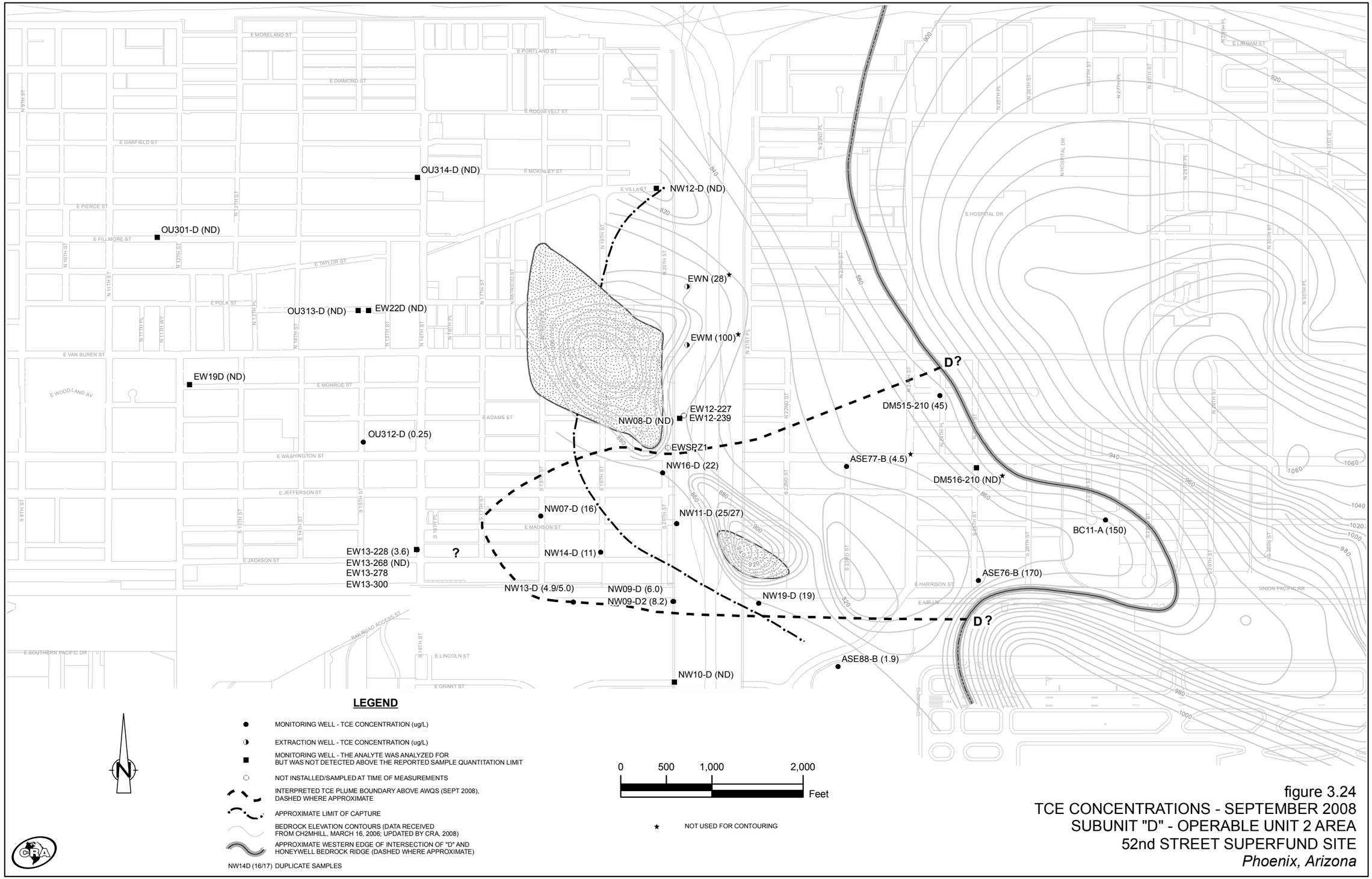


figure 3.24
TCE CONCENTRATIONS - SEPTEMBER 2008
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GIS-WA033_Fig3-24

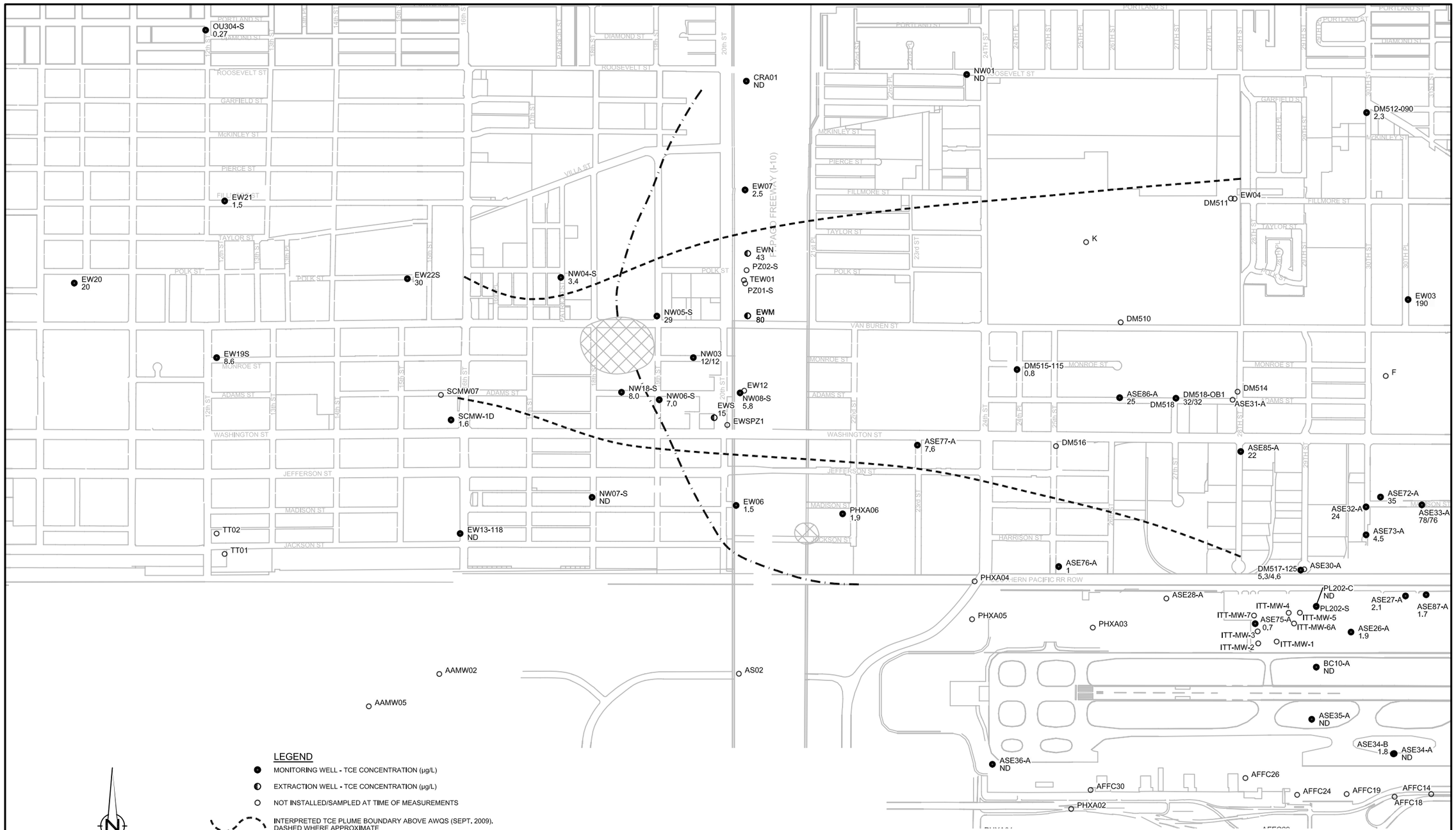


figure 3.22

TCE CONCENTRATIONS - SEPTEMBER 2009
SUBUNIT "A" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX008 FIGURE 3.22 FEB 26/2010

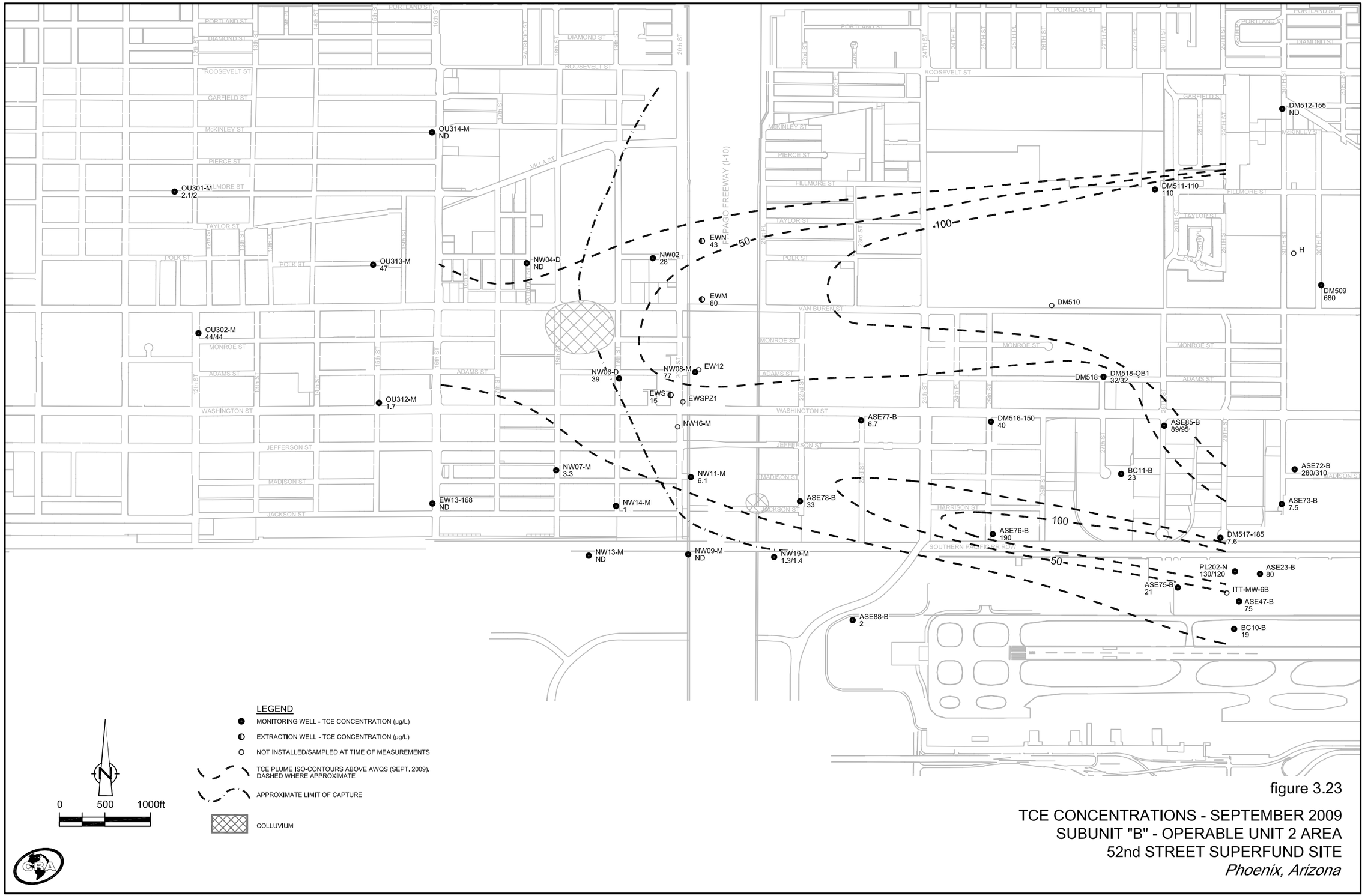


figure 3.23

TCE CONCENTRATIONS - SEPTEMBER 2009
SUBUNIT "B" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX009 FIGURE 3.23 FEB 26/2010

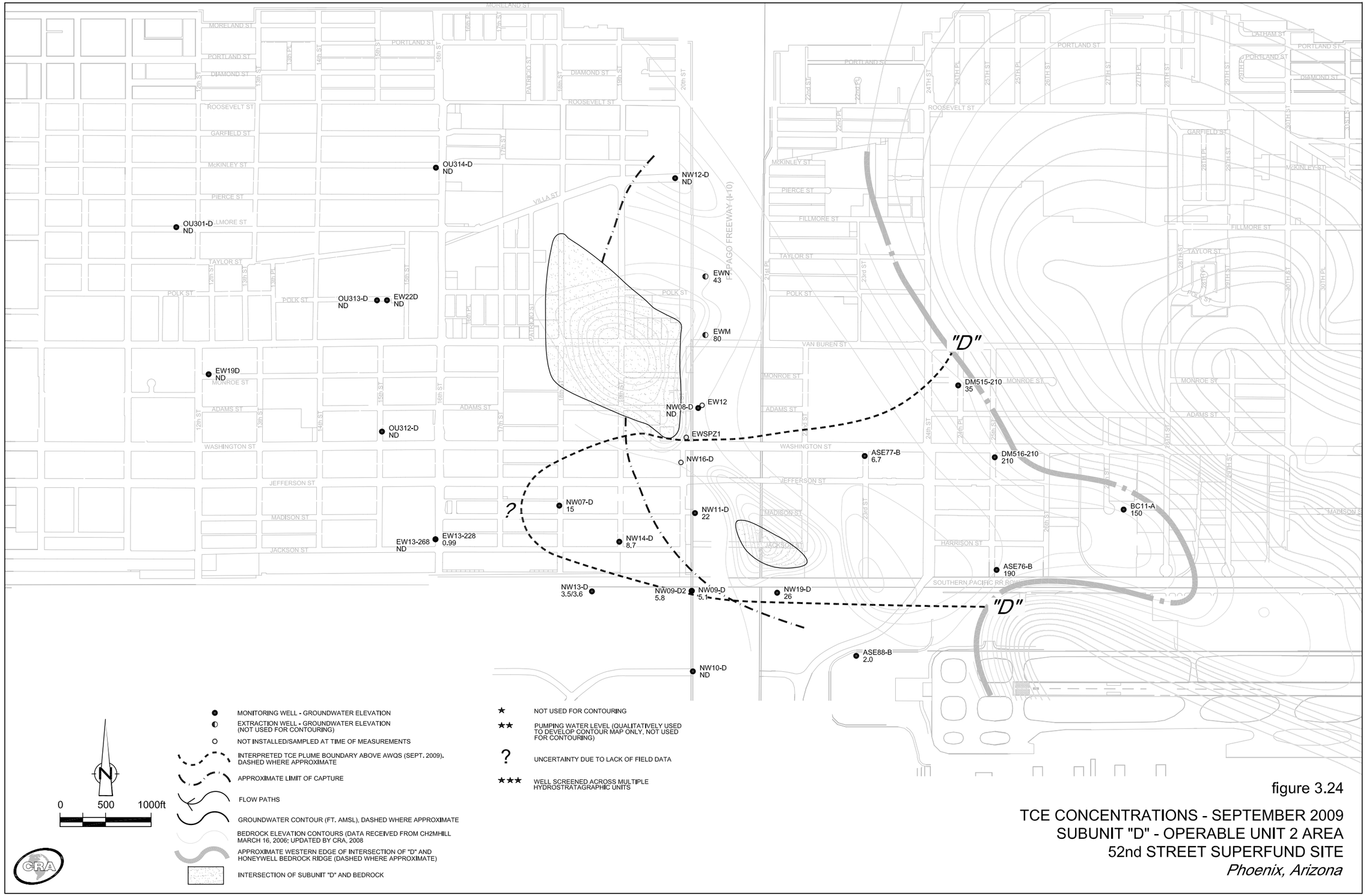
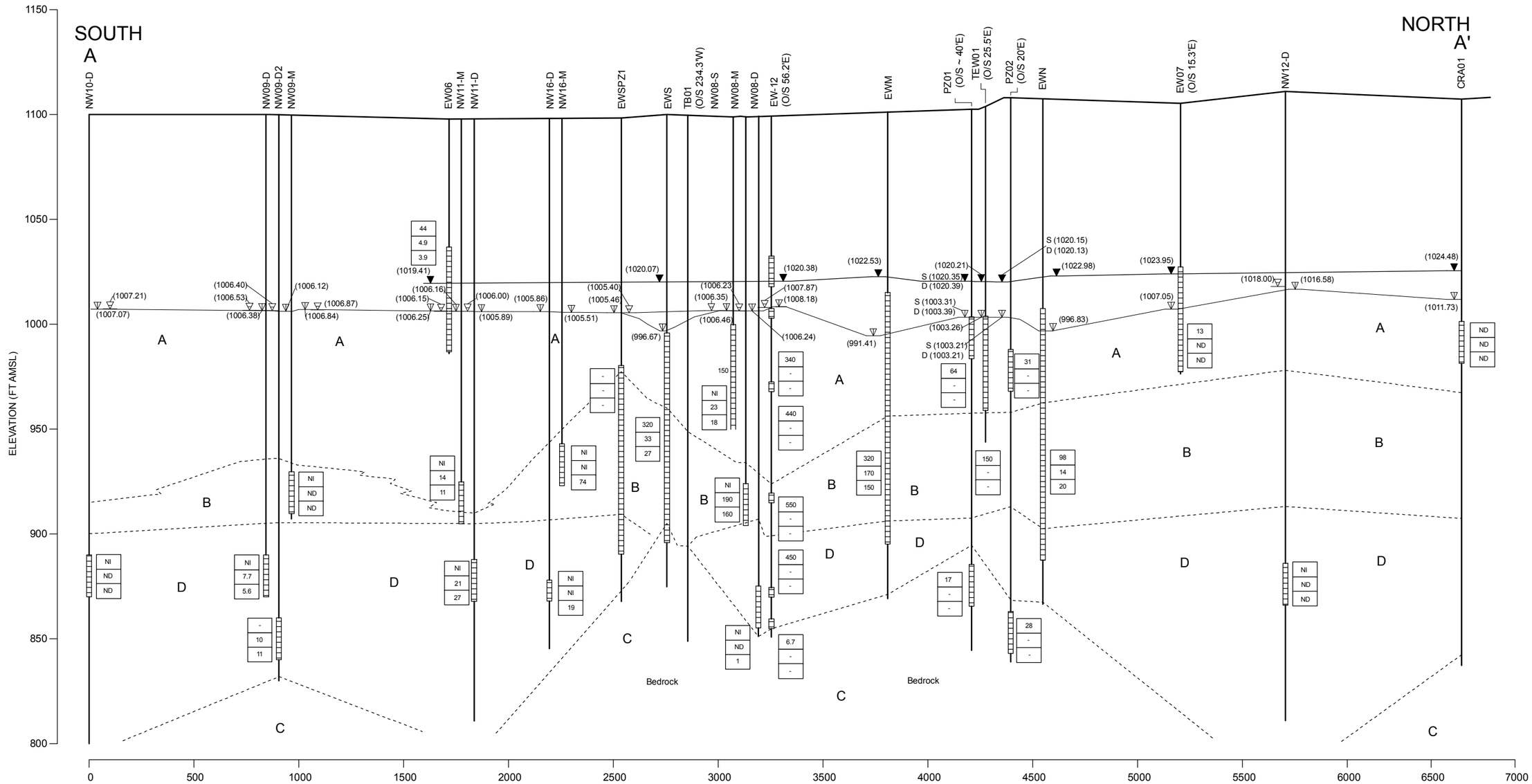


figure 3.24

TCE CONCENTRATIONS - SEPTEMBER 2009
SUBUNIT "D" - OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX010 FIGURE 3.24 APR 15/2010



LEGEND

CRA-1 — WELL NAME

GROUND SURFACE

WELL

WELL SCREEN

(1020.84) WATER ELEVATION (MEASURED JULY/AUGUST 2001)

(1007.24) WATER ELEVATION (MEASURED SEPTEMBER 5, 2006)

(1019.55) WATER ELEVATION (MEASURED SEPTEMBER 4, 2007)

HORIZONTAL SCALE: 1" = 500'

VERTICAL SCALE: 1" = 50'

150 TCE - SEPT 2001

150 TCE - SEPT 2006

150 TCE - SEPT 2007

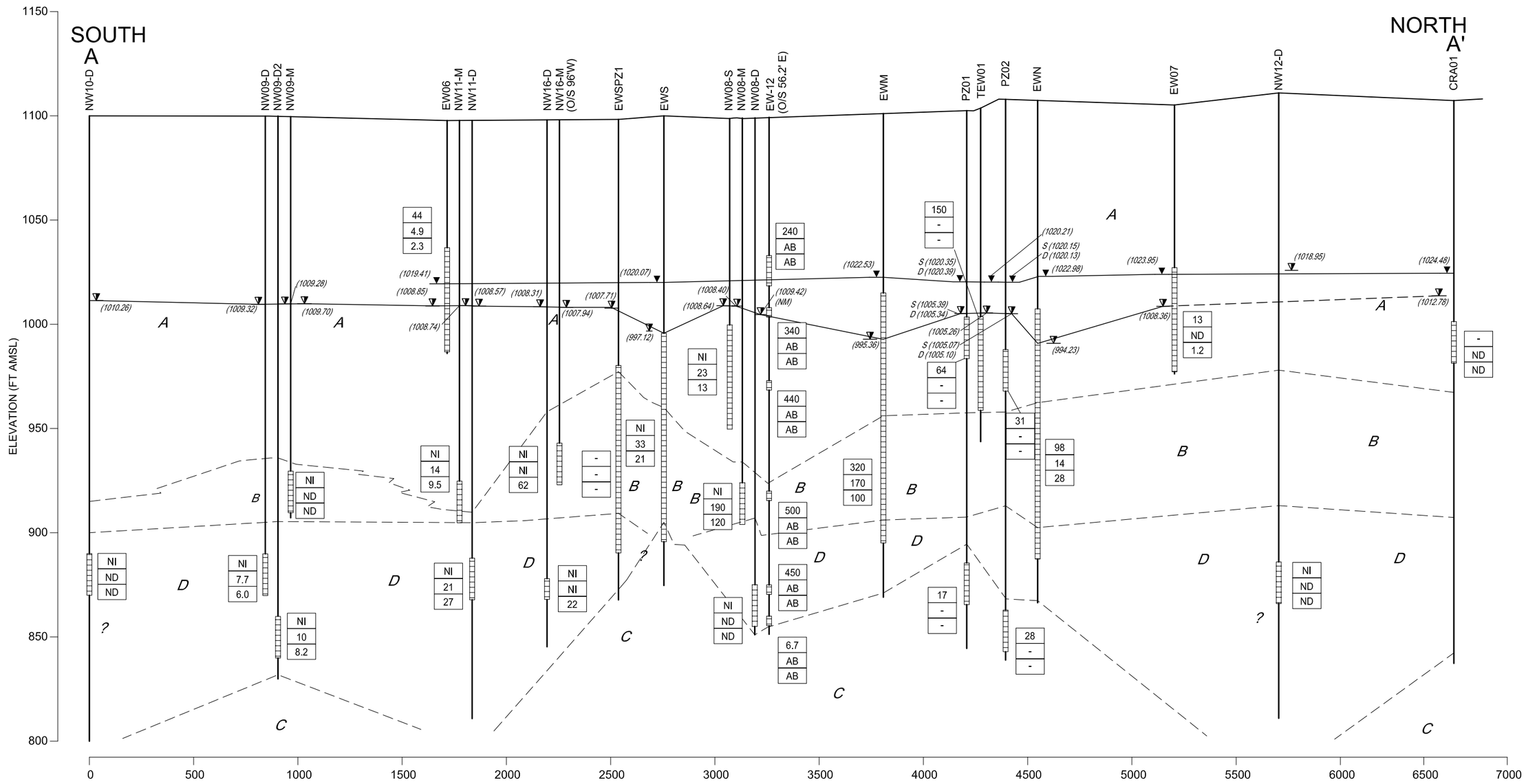
\- NOT SAMPLED

ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

NI NOT INSTALLED

figure 3.28
TCE DISTRIBUTION CROSS SECTION A-A'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA035_Fig3.28



LEGEND

CRA-1 — WELL NAME

GROUND SURFACE

WELL

WELL SCREEN

(1019.41) WATER ELEVATION (MEASURED JULY/AUGUST, 2001)

(1019.55) WATER ELEVATION (MEASURED SEPTEMBER 2-3, 2008)

HORIZONTAL SCALE: 1" = 500'

VERTICAL SCALE: 1" = 50'

150 TCE - SEPT 2001

150 TCE - SEPT 2006

150 TCE - SEPT 2008

\- NOT SAMPLED

ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

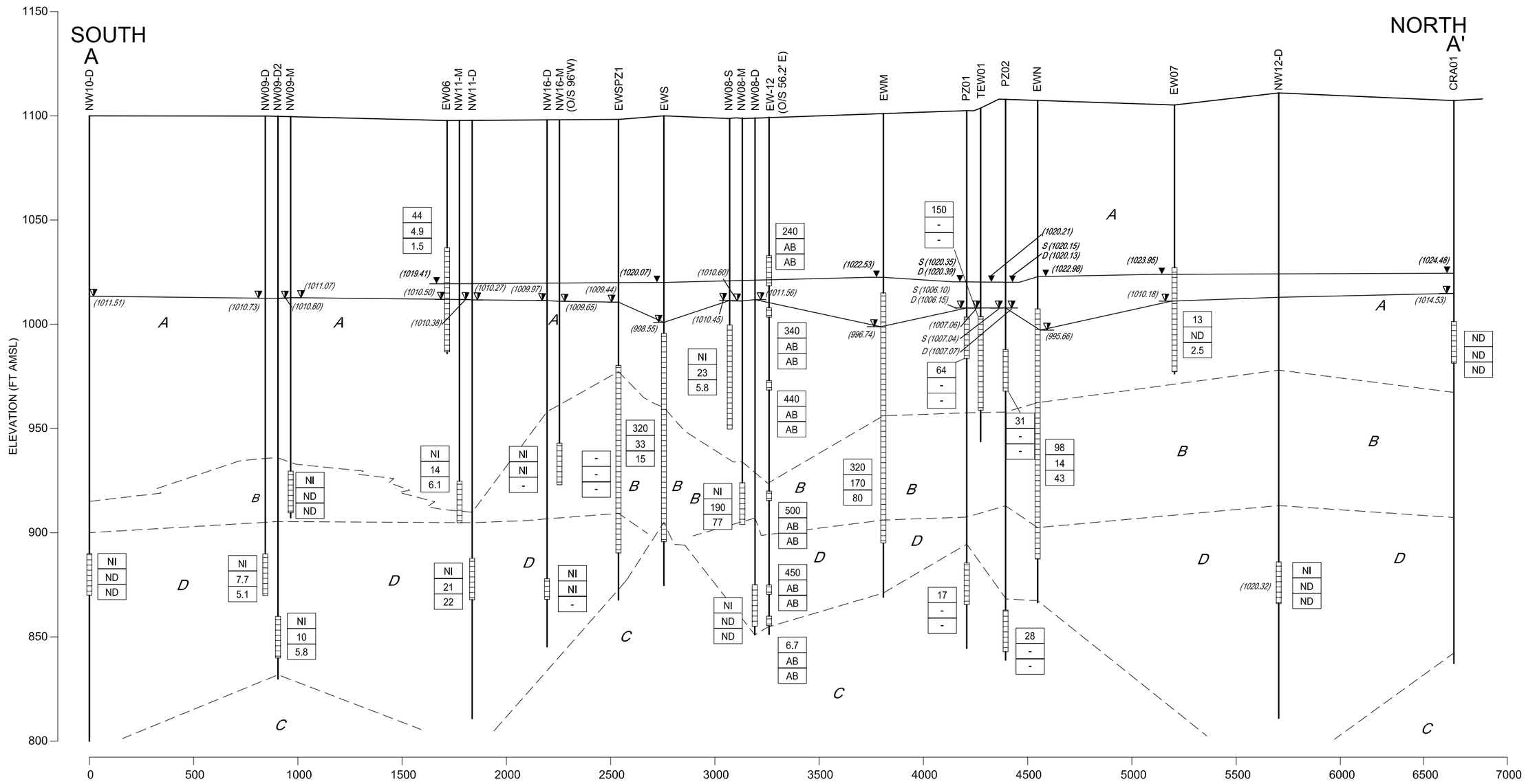
NI NOT INSTALLED

AB ABANDONED (2003)

figure 3.26

TCE DISTRIBUTION GEOLOGIC CROSS SECTION A-A'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GN-PX016 APR 15/2009



LEGEND

CRA-1 — WELL NAME

GROUND SURFACE

WELL

WELL SCREEN

(1019.41) ▼ WATER ELEVATION (MEASURED JULY/SEPTEMBER, 2001)

(1019.55) ▼ WATER ELEVATION (MEASURED SEPTEMBER, 2009)

HORIZONTAL SCALE: 1" = 500'

VERTICAL SCALE: 1" = 50'

150 TCE - SEPT 2001
150 TCE - SEPT 2006
150 TCE - SEPT 2009

- NOT SAMPLED

ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

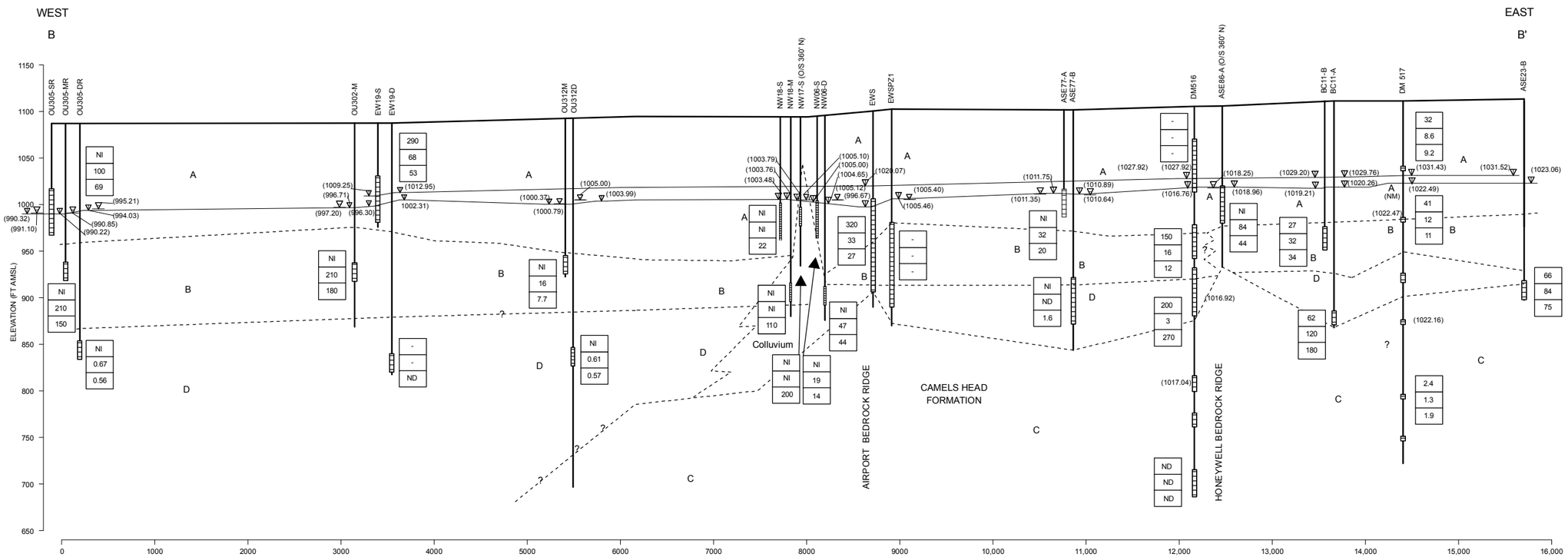
NI NOT INSTALLED

AB ABANDONED (2003)

figure 3.26

TCE DISTRIBUTION GEOLOGIC CROSS SECTION A-A'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX012 FIGURE 3.26 FEB 26/2010



LEGEND

EWS — WELL NAME
— GROUND SURFACE
— WELL
— WELL SCREEN

(1010.76) WATER ELEVATION (MEASURED JULY/AUGUST 2001)
(1005.44) WATER ELEVATION (MEASURED SEPTEMBER 5, 2006)
(1005.44) WATER ELEVATION (MEASURED SEPTEMBER 4, 2007)

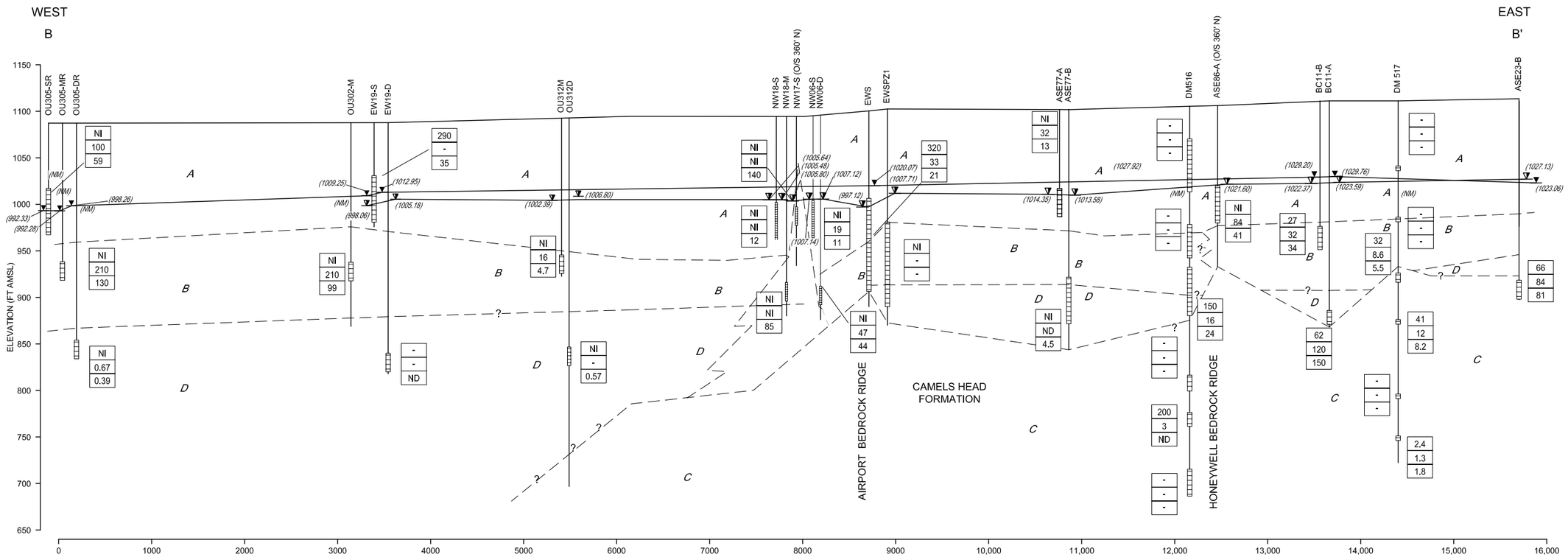
HORIZONTAL SCALE: 1" = 1250'

VERTICAL SCALE: 1" = 125'

150 TCE - SEPT 2001
150 TCE - SEPT 2006
150 TCE - SEPT 2007
- NOT SAMPLED
ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
NI NOT INSTALLED

figure 3.29
TCE DISTRIBUTION CROSS SECTION B-B'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA036_Fig3.29



LEGEND

EWS — WELL NAME
GROUND SURFACE
WELL
WELL SCREEN

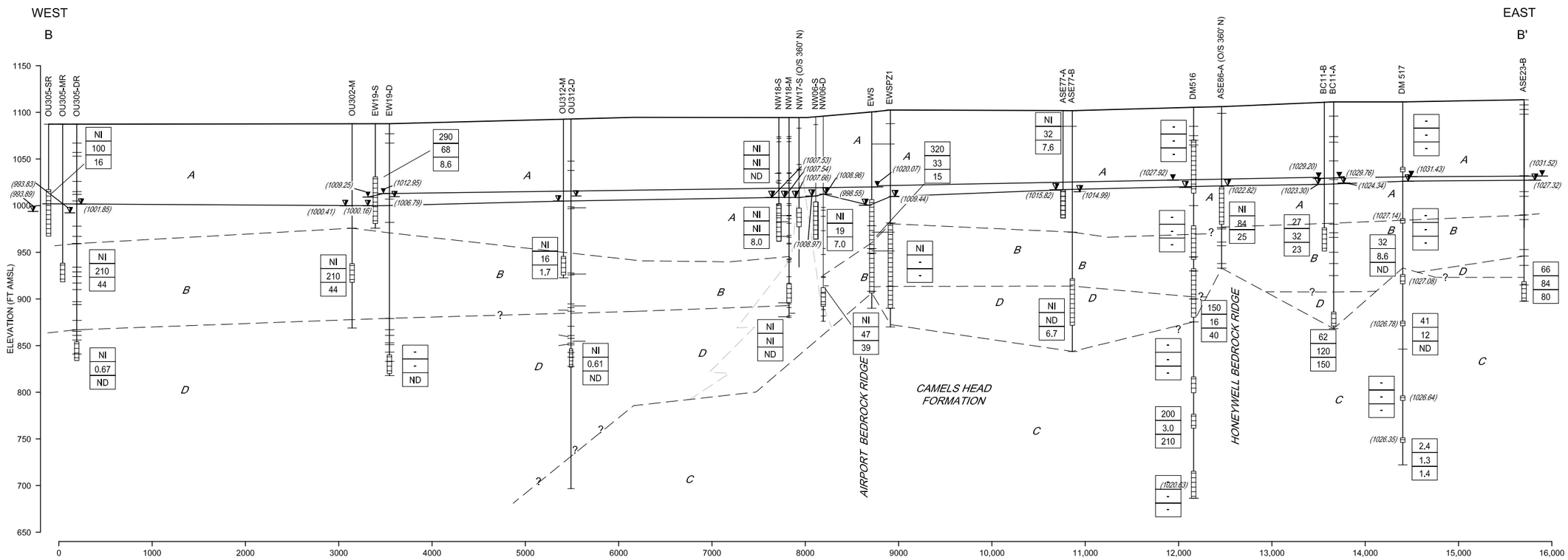
(1009.25) WATER ELEVATION (MEASURED JULY/AUGUST 2001)
(1005.44) WATER ELEVATION (MEASURED SEPTEMBER 2-3, 2008)
(NM) - NOT INSTALLED / NOT MEASURED
HORIZONTAL SCALE: 1" = 1250'
VERTICAL SCALE: 1" = 125'

150 TCE - SEPT 2001
150 TCE - SEPT 2006
150 TCE - SEPT 2008
- NOT SAMPLED
ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
NI NOT INSTALLED

figure 3.27

TCE DISTRIBUTION GEOLOGIC CROSS SECTION B-B'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GN-PX017 APR 13/2009



LEGEND

EWS — WELL NAME
— GROUND SURFACE
— WELL
— WELL SCREEN

(1009.25) ▼ WATER ELEVATION (MEASURED JULY/SEPTEMBER 2001)

(1005.44) ▼ WATER ELEVATION (MEASURED SEPTEMBER, 2009)

(NM) - NOT INSTALLED / NOT MEASURED

HORIZONTAL SCALE: 1" = 1250'

VERTICAL SCALE: 1" = 125'

150 TCE - SEPT 2001
150 TCE - SEPT 2006
150 TCE - SEPT 2009

- NOT SAMPLED

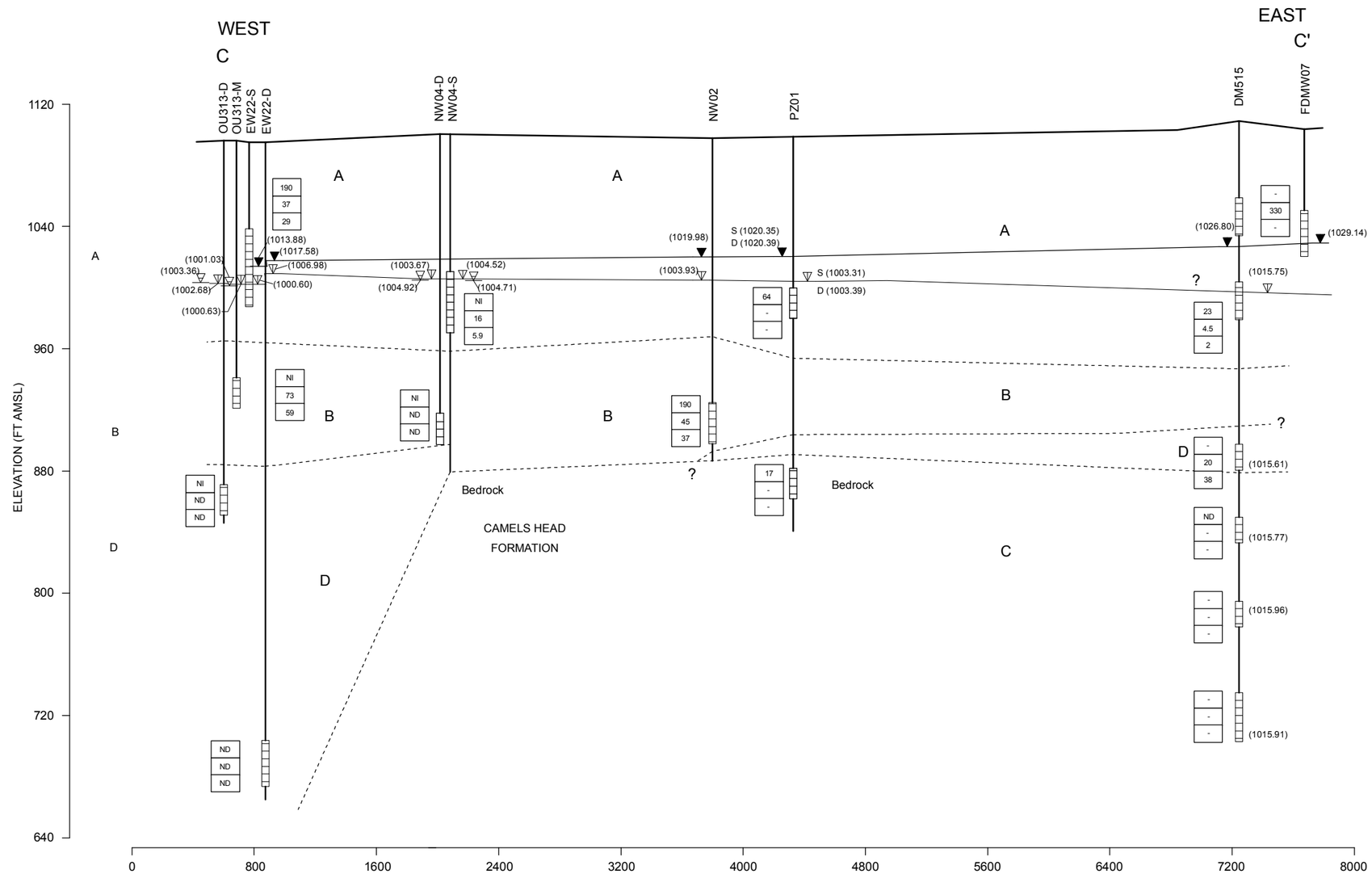
ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

NI NOT INSTALLED

figure 3.27

TCE DISTRIBUTION GEOLOGIC CROSS SECTION B-B'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX013 FIGURE 3.27 FEB 26/2010



LEGEND

NW02 — WELL NAME

GROUND SURFACE

WELL

WELL SCREEN

(1018.75) WATER ELEVATION (MEASURED JULY/AUGUST 2001)

(1004.89) WATER ELEVATION (MEASURED SEPTEMBER 5, 2006)

(1004.89) WATER ELEVATION (MEASURED SEPTEMBER 4, 2007)

HORIZONTAL SCALE: 1" = 800'

VERTICAL SCALE: 1" = 80'

150 TCE - SEPT 2001

150 TCE - SEPT 2006

150 TCE - SEPT 2007

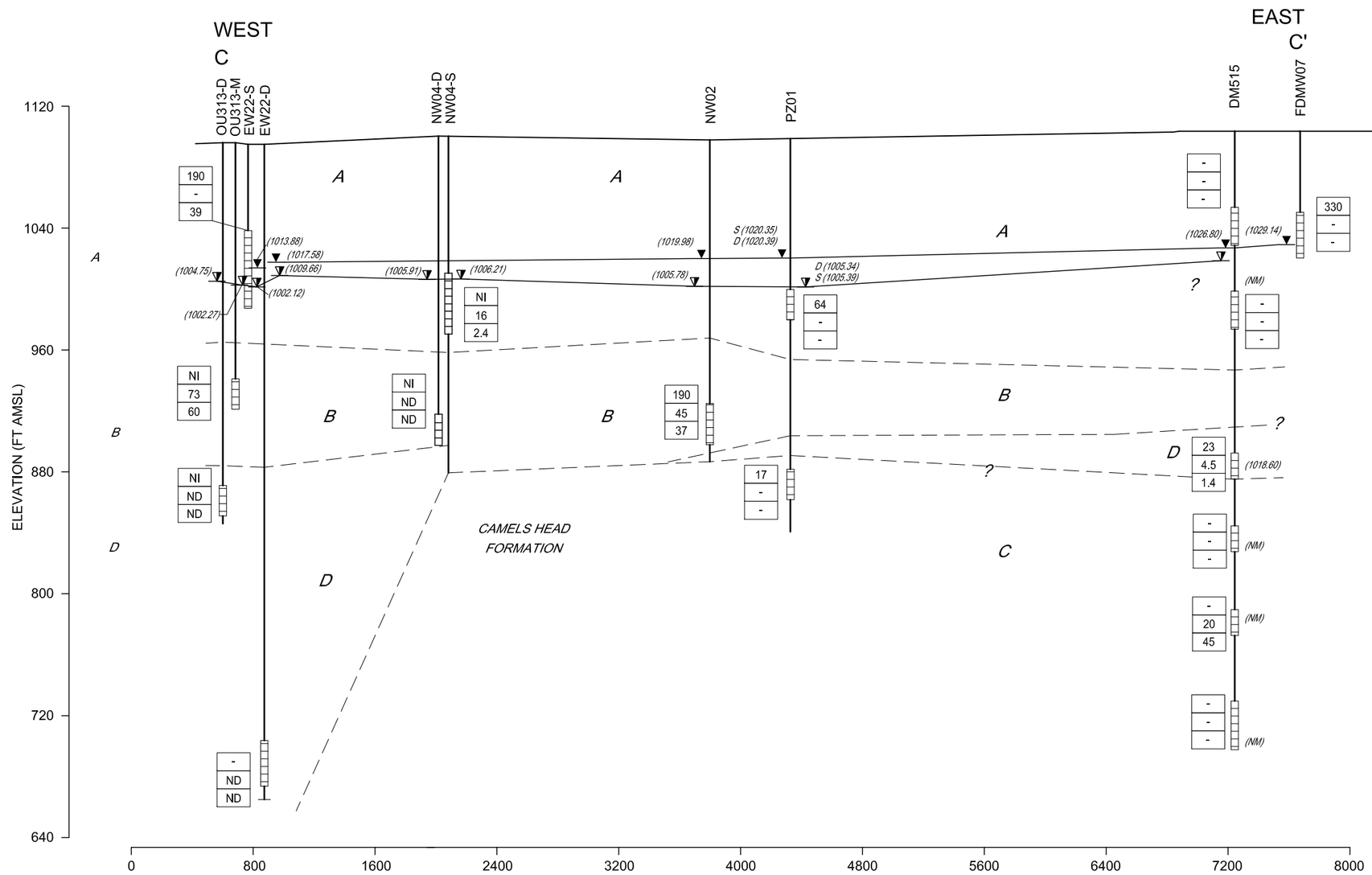
\- NOT SAMPLED

ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

NI NOT INSTALLED

figure 3.30
TCE DISTRIBUTION CROSS SECTION C-C'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA037_Fig3.30



LEGEND

CRA-1 — WELL NAME

GROUND SURFACE

WELL

WELL SCREEN

(1013.88) WATER ELEVATION (MEASURED JULY/AUGUST 2001)

(1004.89) WATER ELEVATION (MEASURED SEPTEMBER 2-3, 2008)

NM - NOT INSTALLED / NOT MEASURED

HORIZONTAL SCALE: 1" = 800'

VERTICAL SCALE: 1" = 80'

150 TCE - SEPT 2001

150 TCE - SEPT 2006

150 TCE - SEPT 2008

\- NOT SAMPLED

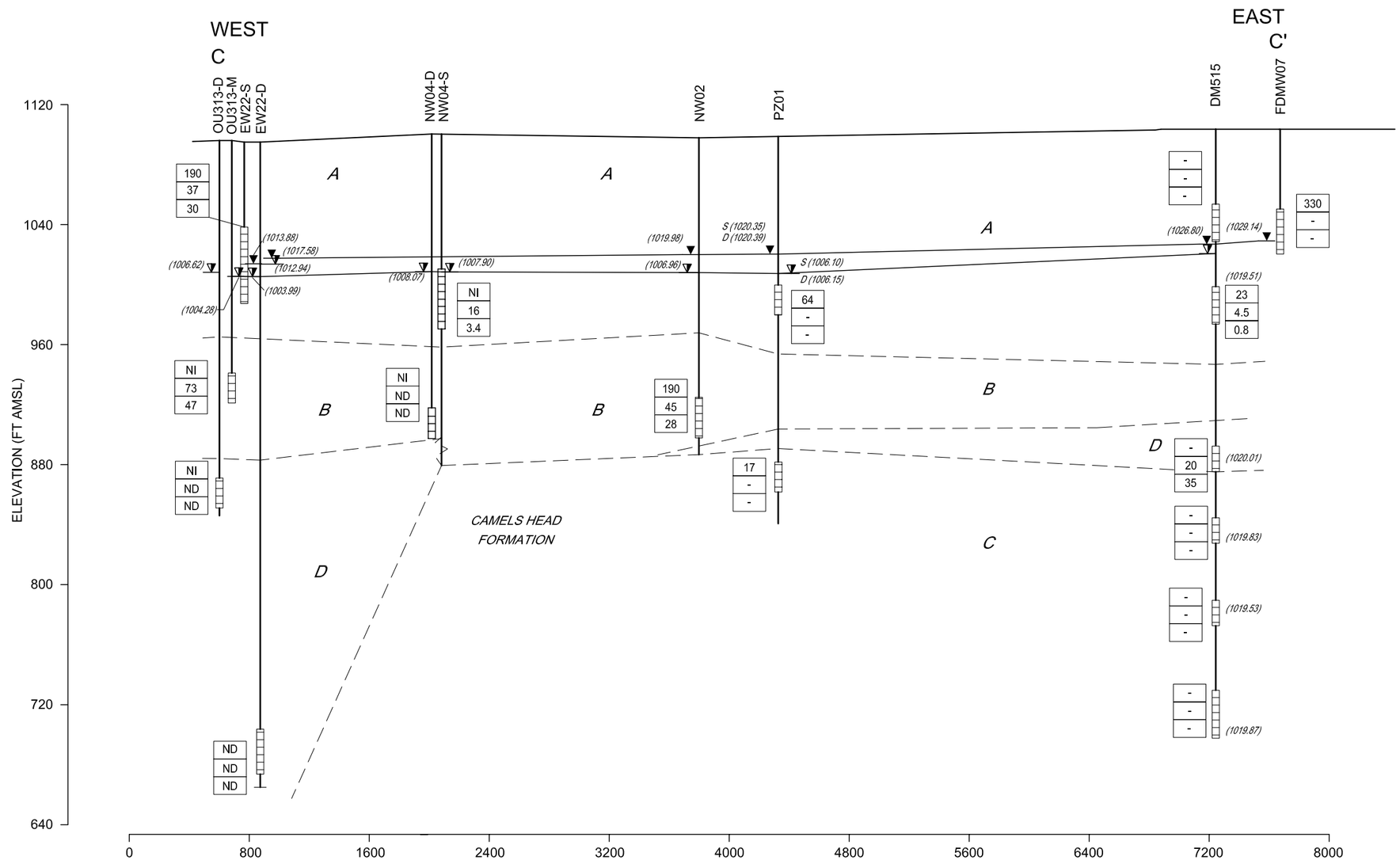
ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

NI NOT INSTALLED

figure 3.28

TCE DISTRIBUTION GEOLOGIC CROSS SECTION C-C'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GN-PX018 APR 14/2009



LEGEND

CRA-1 — WELL NAME

GROUND SURFACE

WELL

WELL SCREEN

(1013.88) WATER ELEVATION (MEASURED JULY/SEPTEMBER, 2001)

(1004.89) WATER ELEVATION (MEASURED SEPTEMBER, 2009)

NM - NOT INSTALLED / NOT MEASURED

HORIZONTAL SCALE: 1" = 800'

VERTICAL SCALE: 1" = 80'

150 TCE - SEPT 2001

150 TCE - SEPT 2006

150 TCE - SEPT 2009

\- NOT SAMPLED

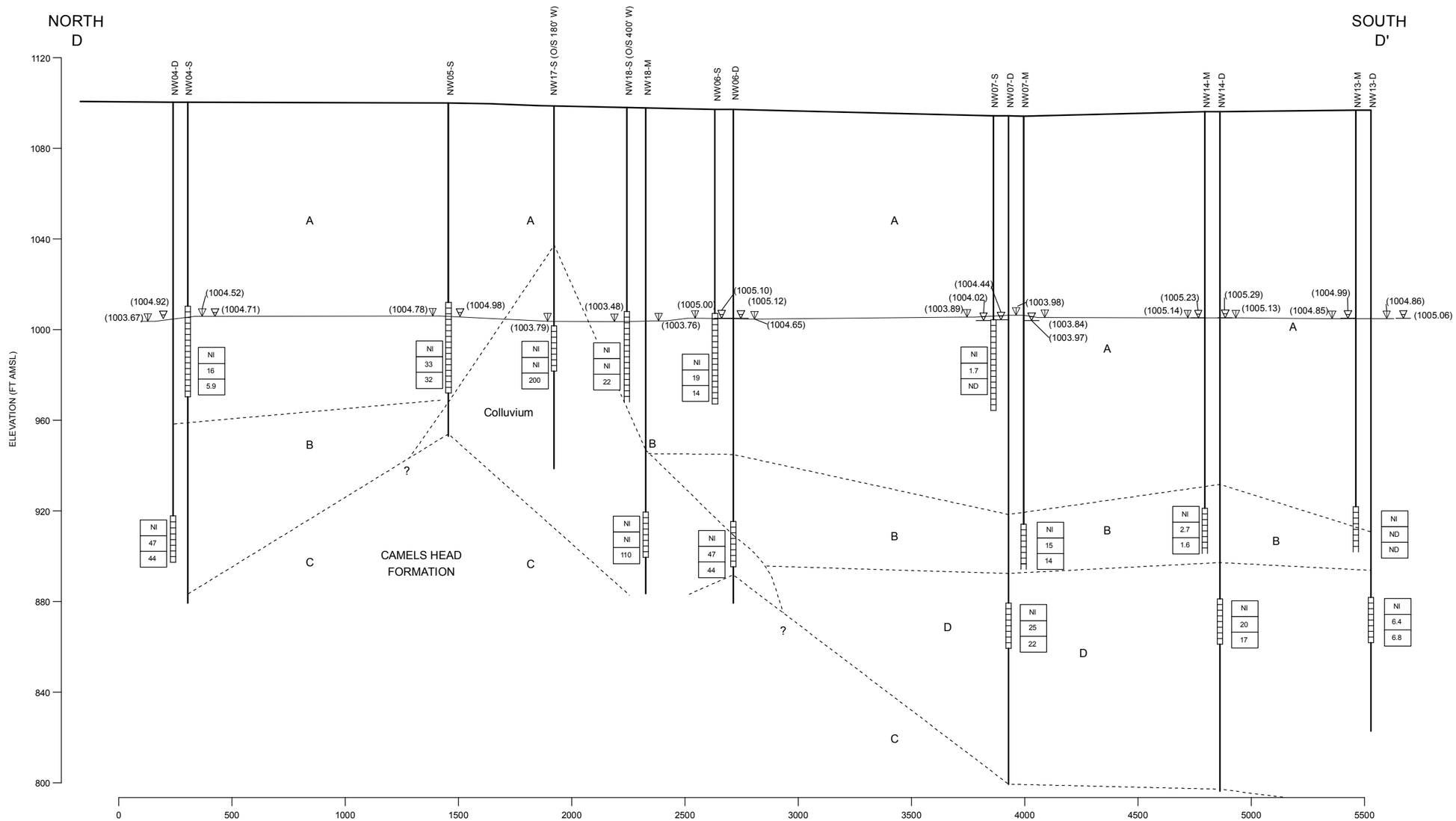
ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

NI NOT INSTALLED

figure 3.28

TCE DISTRIBUTION GEOLOGIC CROSS SECTION C-C'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX014 FIGURE 3.28 FEB 26/2010



LEGEND

NW04-S — WELL NAME
— GROUND SURFACE
— WELL
— WELL SCREEN

(1006.51) — WATER ELEVATION (MEASURED JULY/AUGUST 2001)
(1006.51) — WATER ELEVATION (MEASURED JULY/AUGUST 2001)
(1006.51*) — WATER ELEVATION (MEASURED SEPTEMBER 4, 2007)

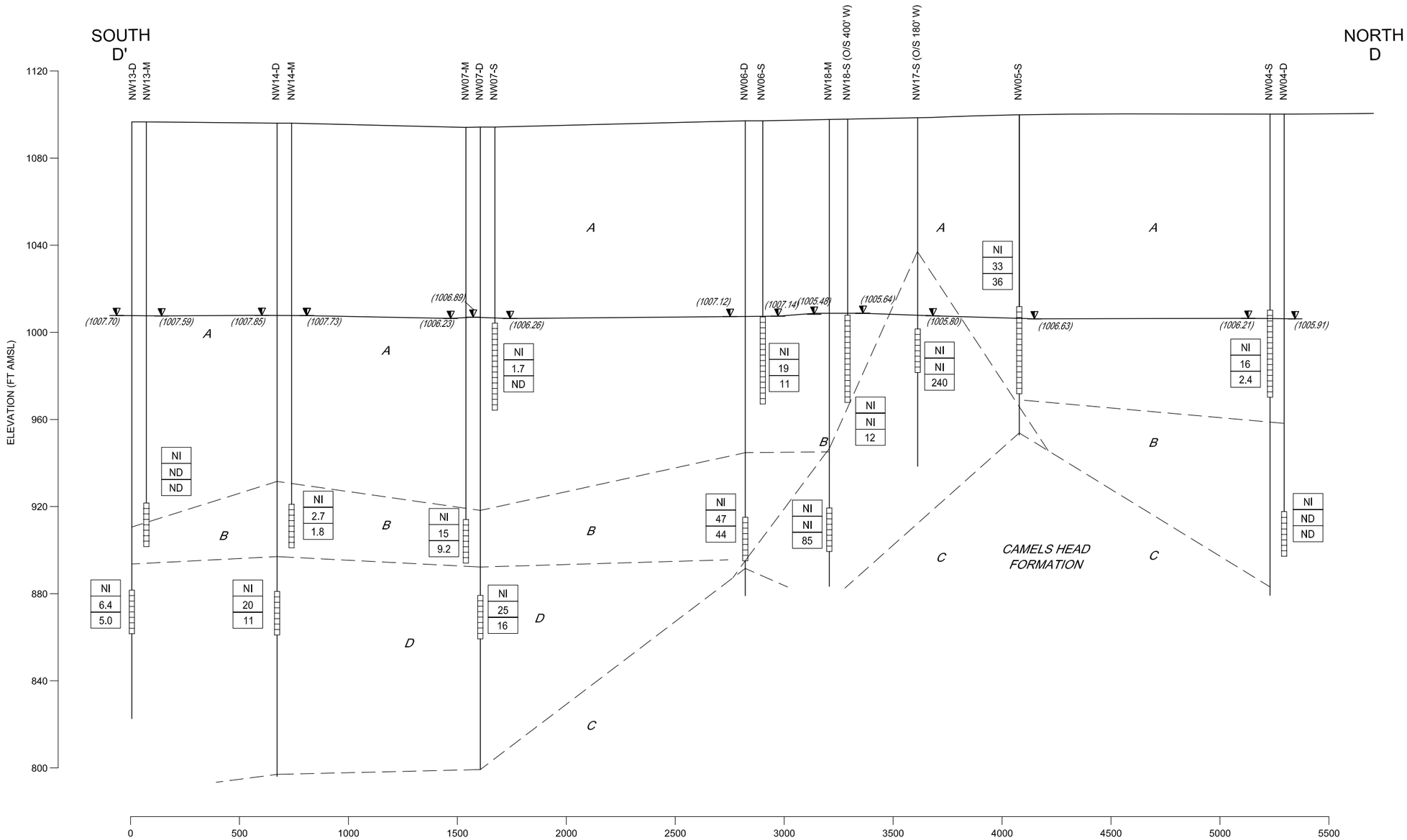
150 — TCE - SEPT 2001
150 — TCE - SEPT 2006
150 — TCE - SEPT 2007
\- — NOT SAMPLED
ND — THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
NI — NOT INSTALLED

HORIZONTAL SCALE: 1' = 500"

VERTICAL SCALE: 1' = 50"

figure 3.31
TCE DISTRIBUTION CROSS SECTION D-D'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA038_Fig3.31



LEGEND

CRA-1 — WELL NAME
— GROUND SURFACE
— WELL
— WELL SCREEN

(1002.57) — WATER ELEVATION (MEASURED SEPTEMEBER 2-3, 2008)

HORIZONTAL SCALE: 1" = 500'
VERTICAL SCALE: 1" = 50'

150	TCE - SEPT 2001
150	TCE - SEPT 2006
150	TCE - SEPT 2008

- NOT SAMPLED

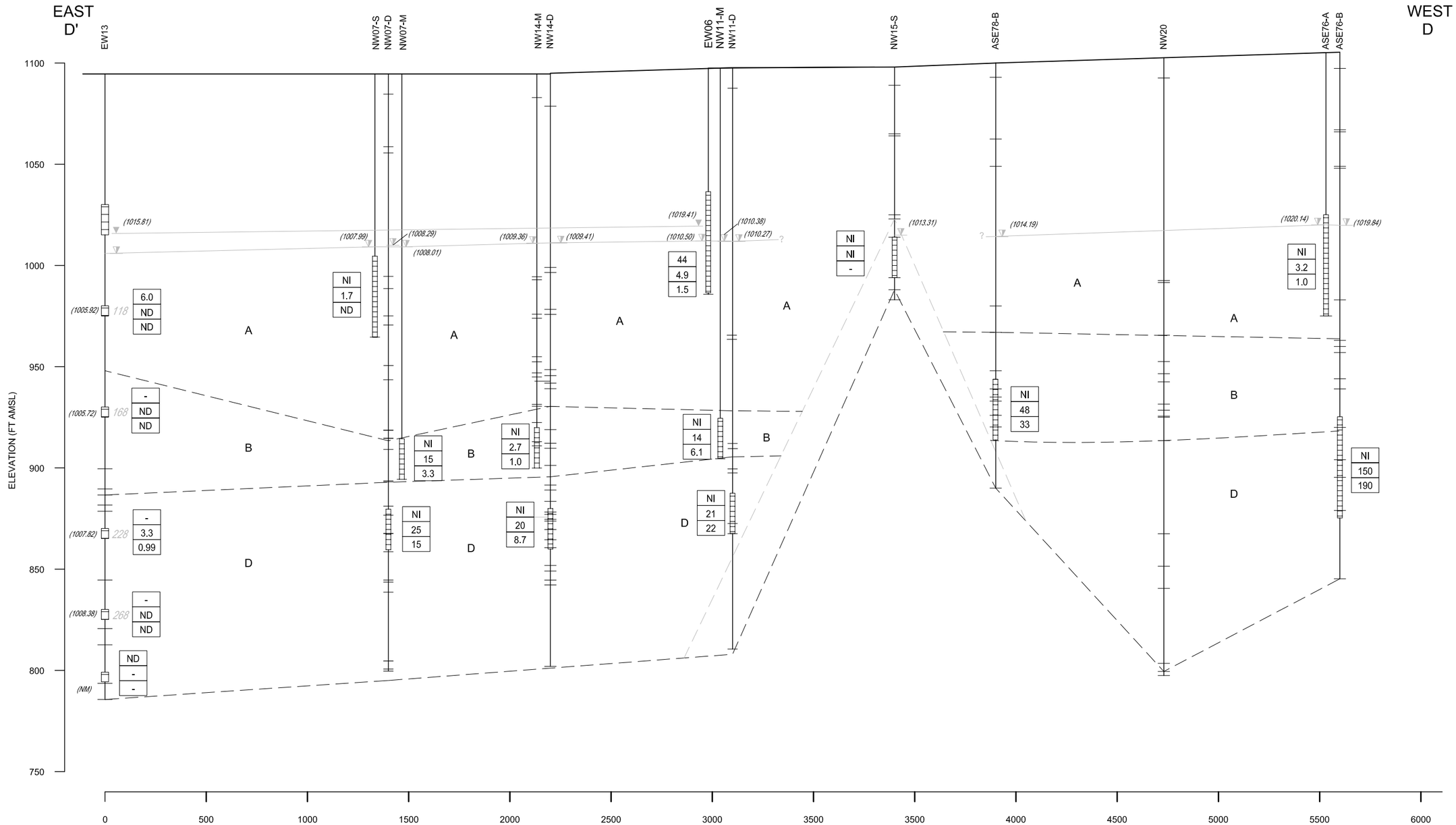
ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

NI NOT INSTALLED

figure 3.29

TCE DISTRIBUTION GEOLOGIC CROSS SECTION D-D'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(021)GN-PX019 APR 13/2009



LEGEND

CRA-1 — WELL NAME

— GROUND SURFACE

— WELL

— WELL SCREEN

(1015.81) WATER ELEVATION (MEASURED JULY/SEPTEMBER, 2001)

(1002.57) WATER ELEVATION (MEASURED SEPTEMEBER, 2009)

HORIZONTAL SCALE: 1" = 500'

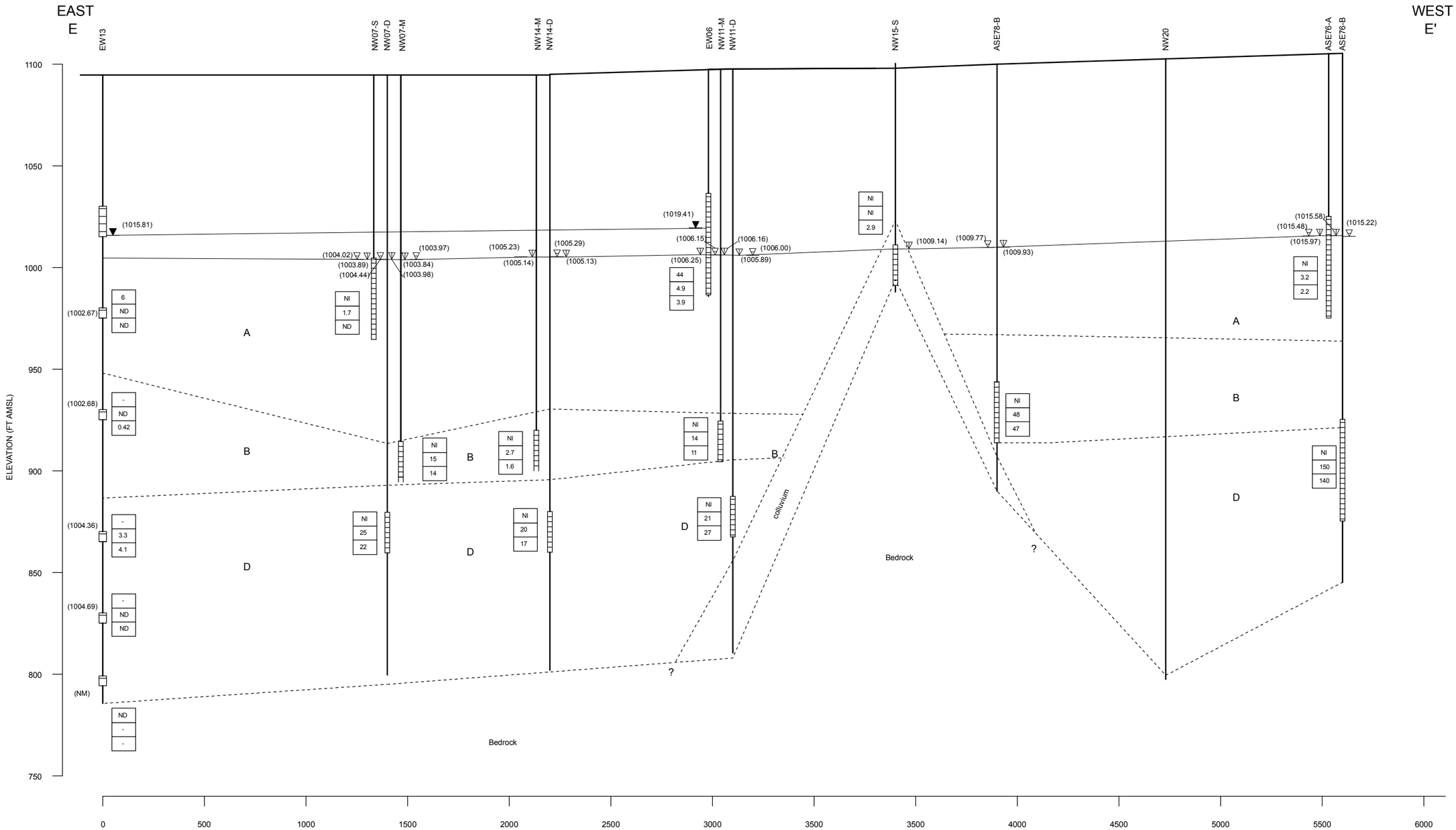
VERTICAL SCALE: 1" = 50'

150	TCE - SEPT 2001
150	TCE - SEPT 2006
150	TCE - SEPT 2009
-	NOT SAMPLED
ND	THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
NI	NOT INSTALLED

figure 3.29

TCE DISTRIBUTION GEOLOGIC CROSS SECTION D-D'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(023)GN-PX015 FIGURE 3.29 FEB 26/2010



LEGEND

EW06 — WELL NAME
GROUND SURFACE
WELL
WELL SCREEN

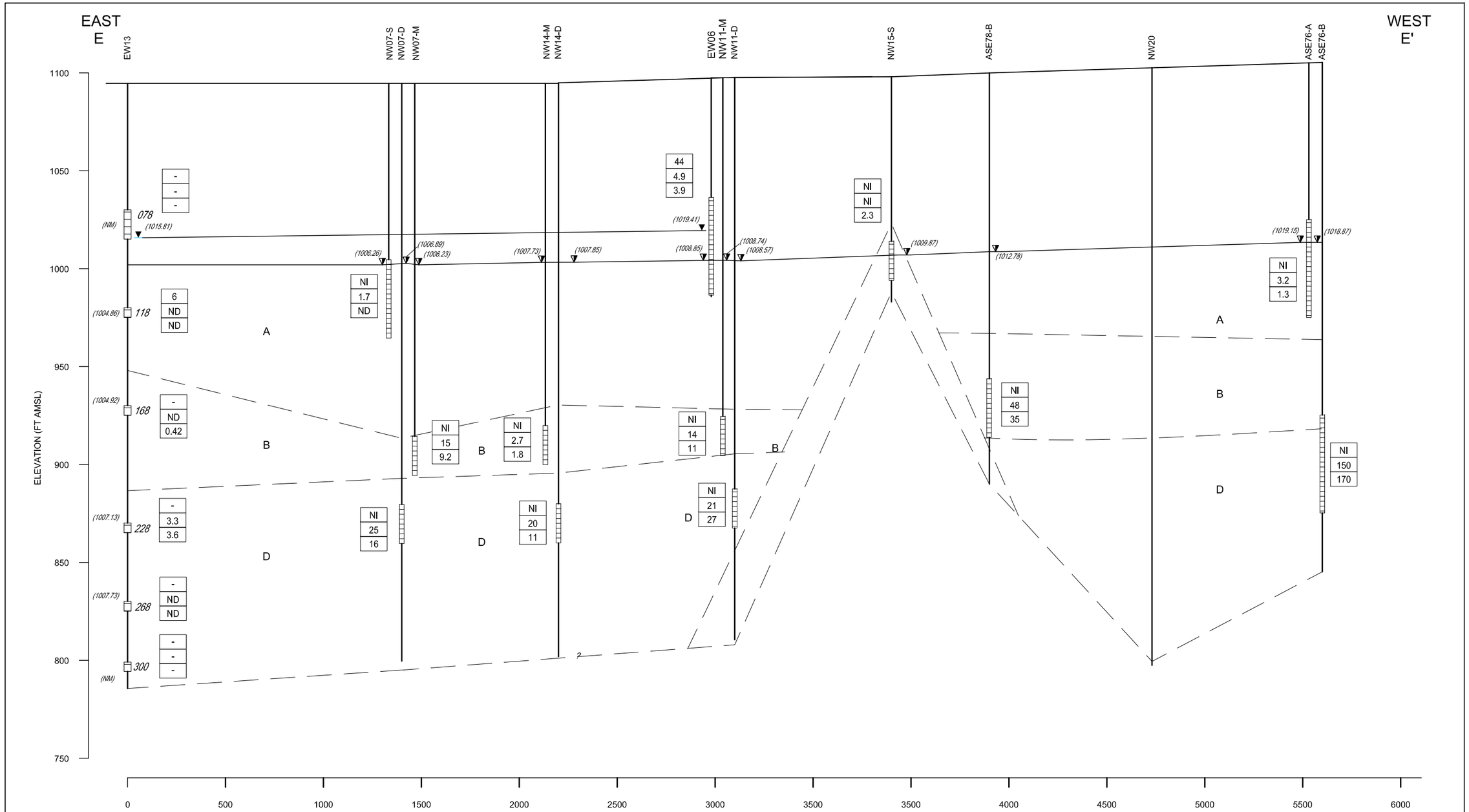
(1018.75) WATER ELEVATION (MEASURED SEPTEMBER 2001)
(1018.75) WATER ELEVATION (MEASURED SEPTEMBER 5, 2006)
(1004.89) WATER ELEVATION (MEASURED SEPTEMBER 4, 2007)

150	TCE - SEPT 2001
150	TCE - SEPT 2006
150	TCE - SEPT 2007
-	NOT SAMPLED
ND	THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT
NI	NOT INSTALLED

HORIZONTAL SCALE: 1" = 500'
VERTICAL SCALE: 1" = 50'

figure 3.32
TCE DISTRIBUTION CROSS SECTION E-E'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

013932-151(020)GIS-WA039_Fig3.32



LEGEND

EWS — WELL NAME
GROUND SURFACE
WELL
WELL SCREEN

(1015.81) WATER ELEVATION (MEASURED JULY/AUGUST 2001)

(1004.89) WATER ELEVATION (MEASURED DECEMBER 3, 2007)

NM - NOT INSTALLED / NOT MEASURED

HORIZONTAL SCALE: 1" = 500'

VERTICAL SCALE: 1" = 50'

150 TCE - SEPT 2001
150 TCE - SEPT 2006
150 TCE - SEPT 2008

- NOT SAMPLED

ND THE ANALYTE WAS ANALYZED FOR BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT

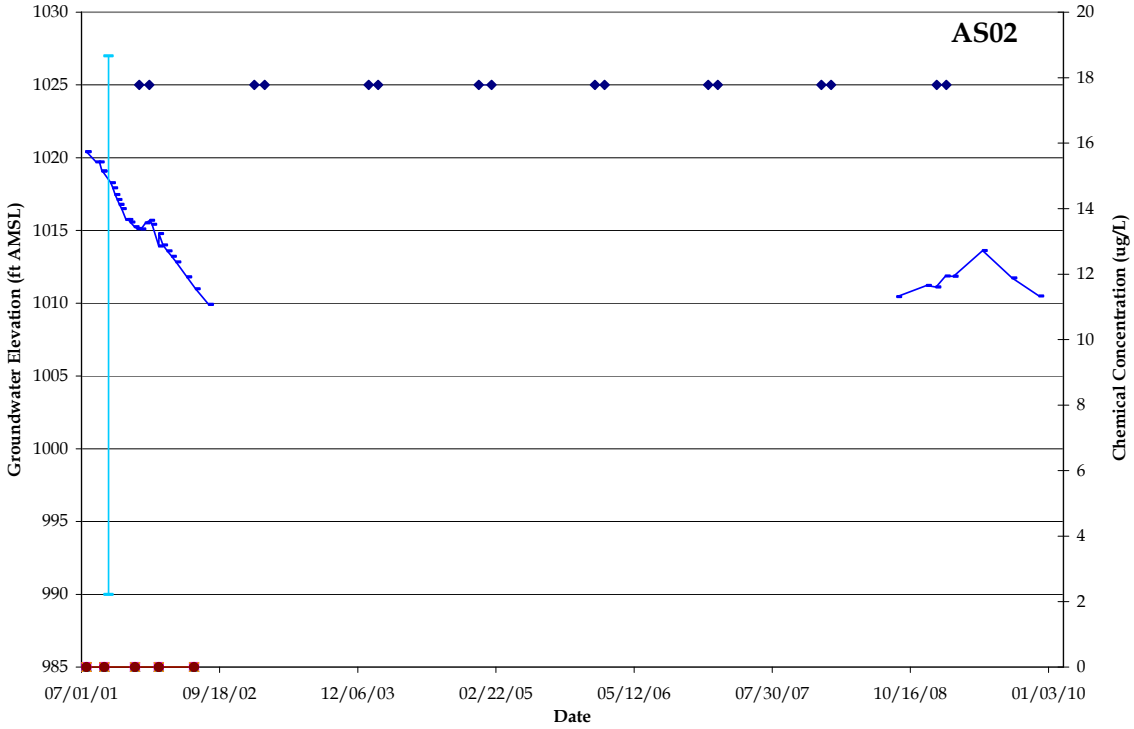
NI NOT INSTALLED

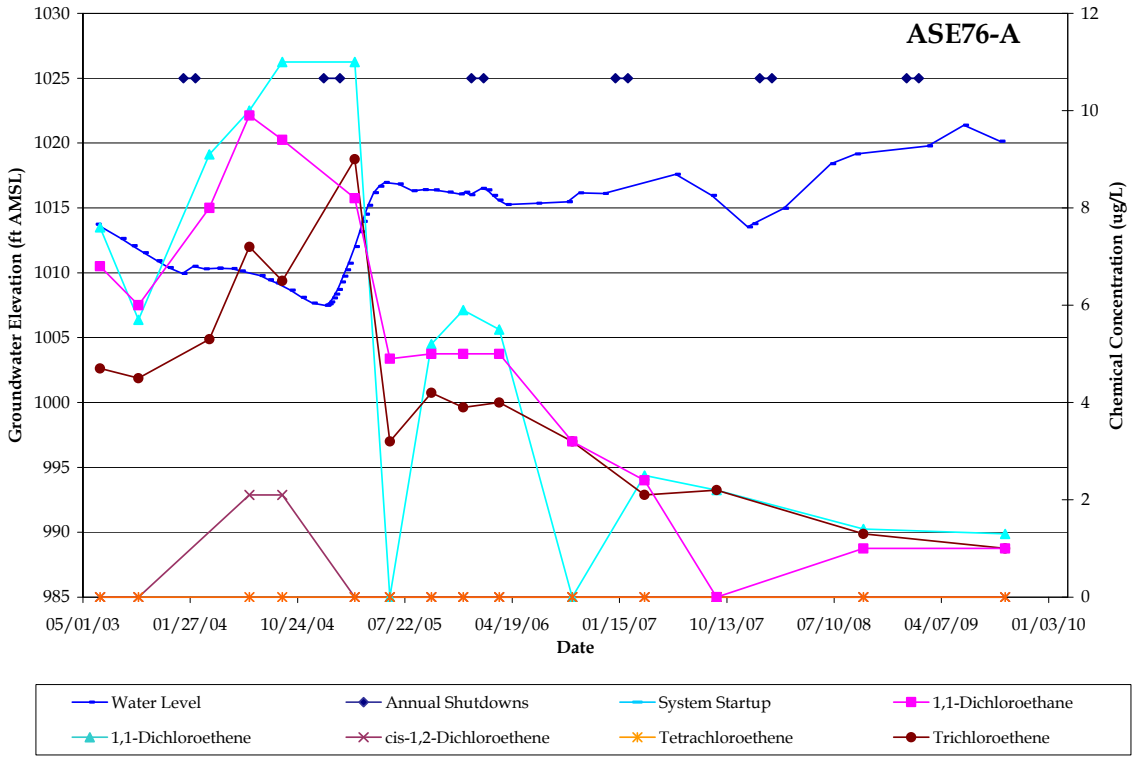
figure 3.30

TCE DISTRIBUTION GEOLOGIC CROSS SECTION E-E'
OPERABLE UNIT 2 AREA
52nd STREET SUPERFUND SITE
Phoenix, Arizona

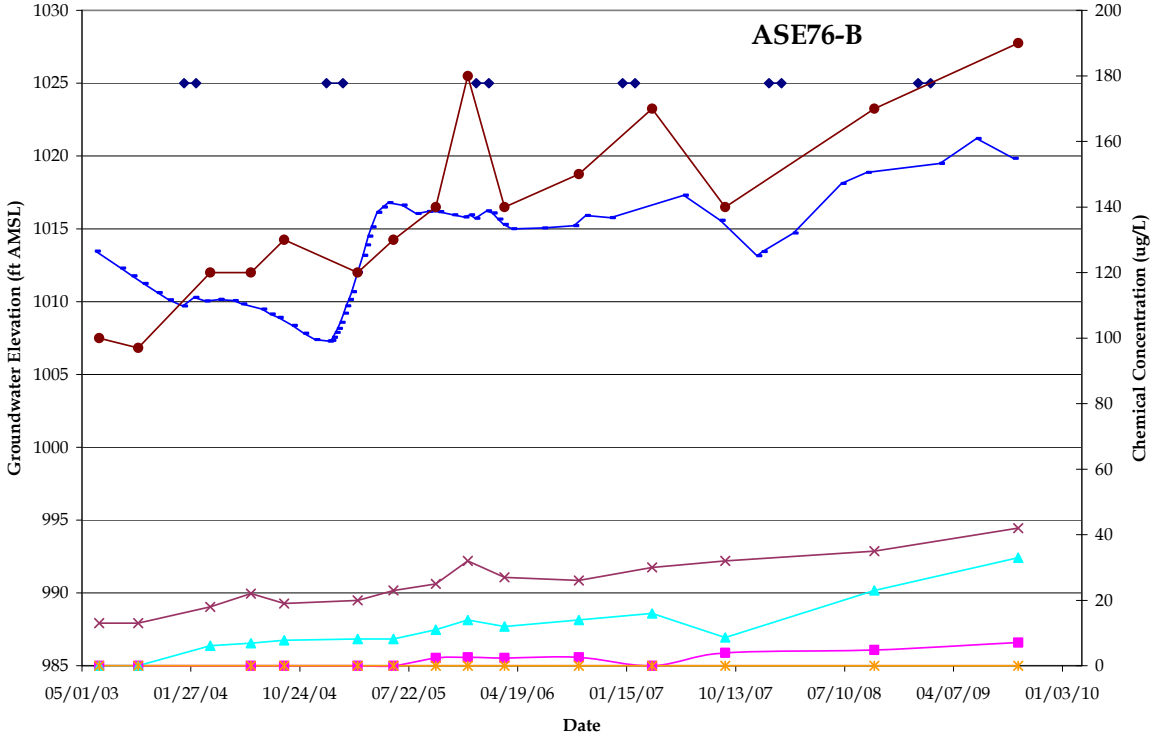
013932-151(021)GN-PX020 APR 14/2009

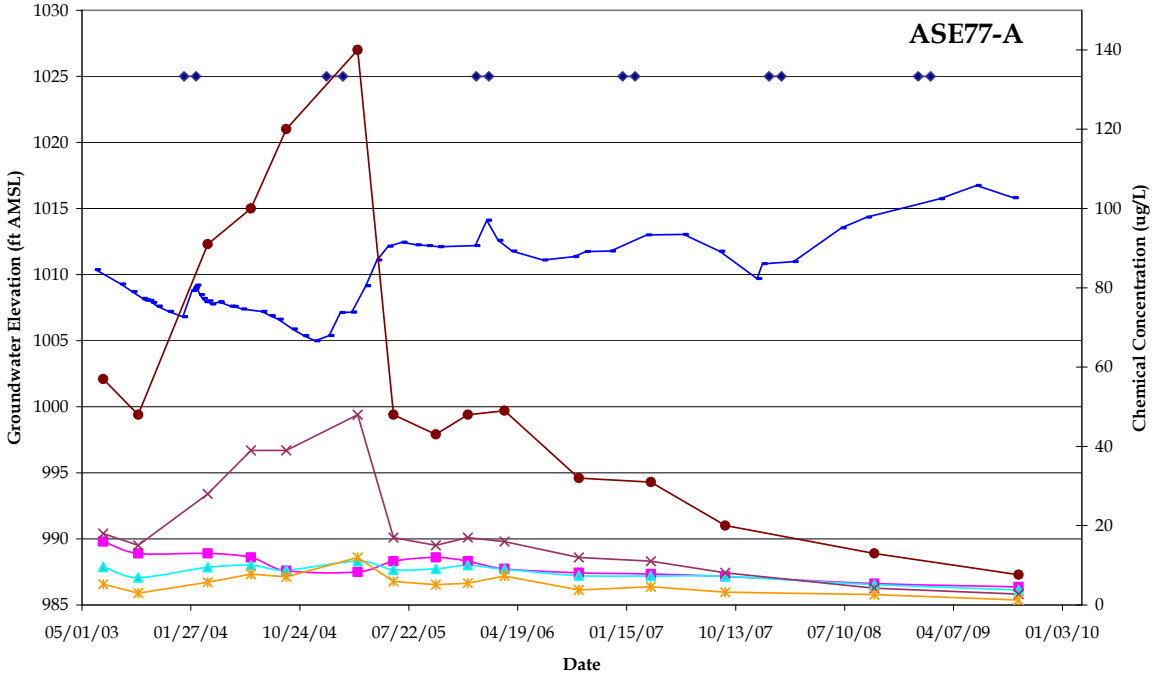
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



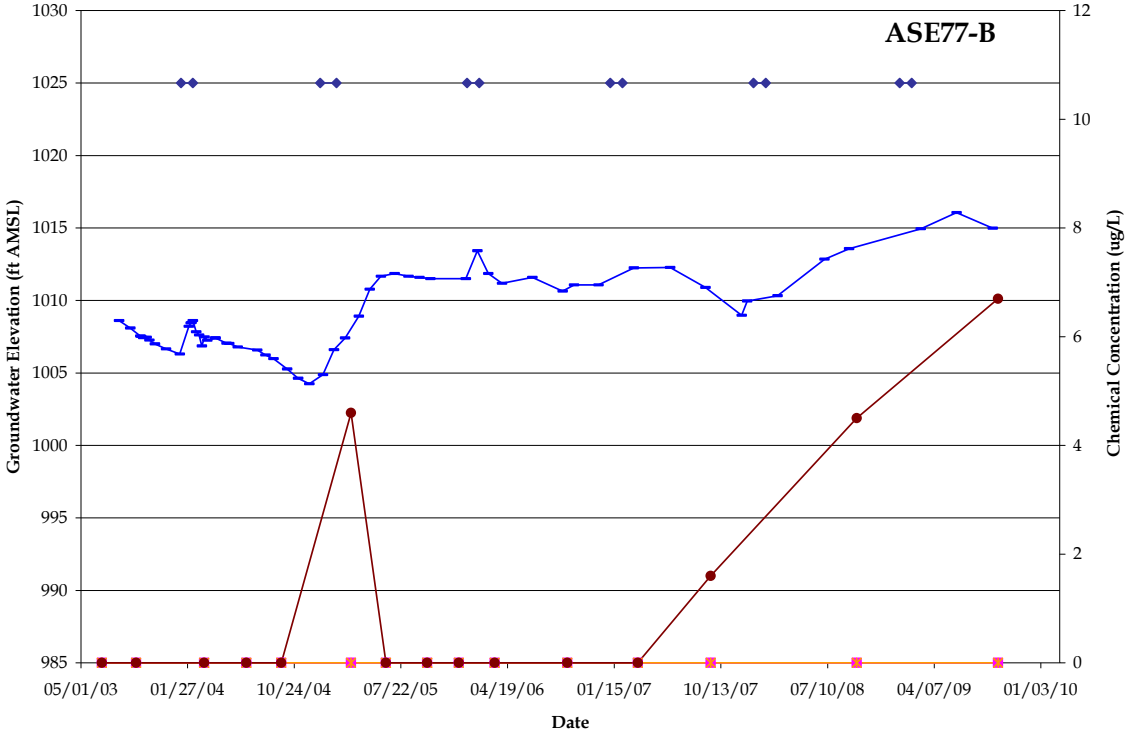


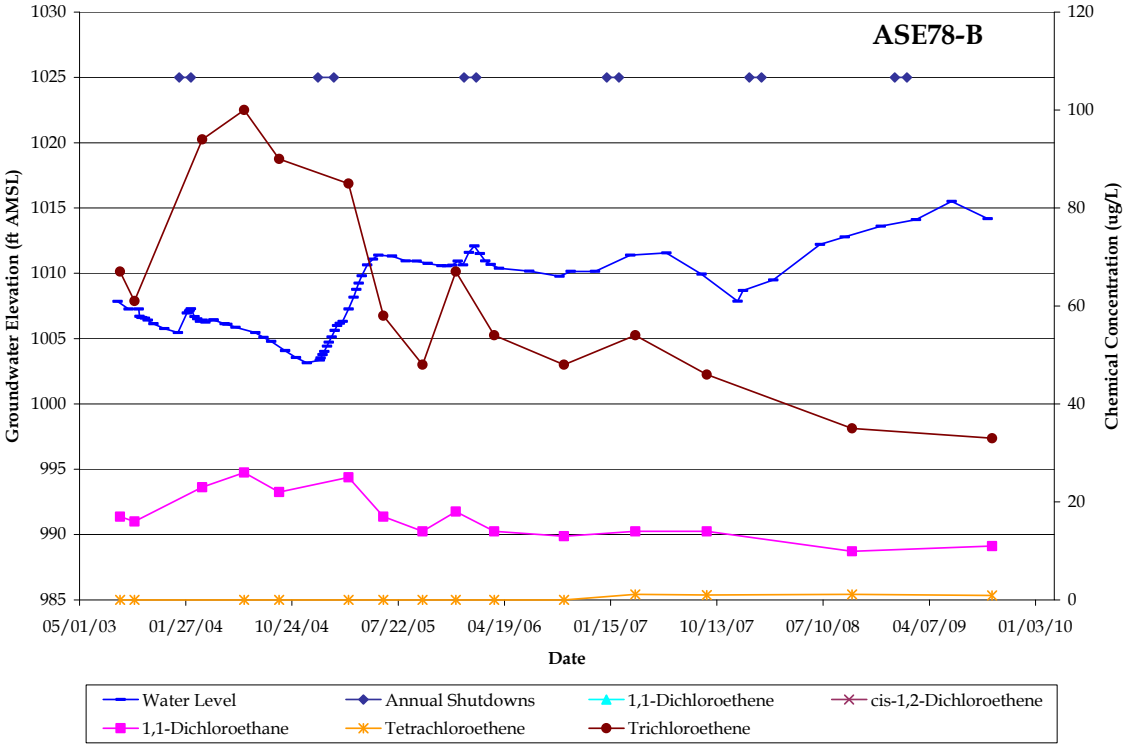
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



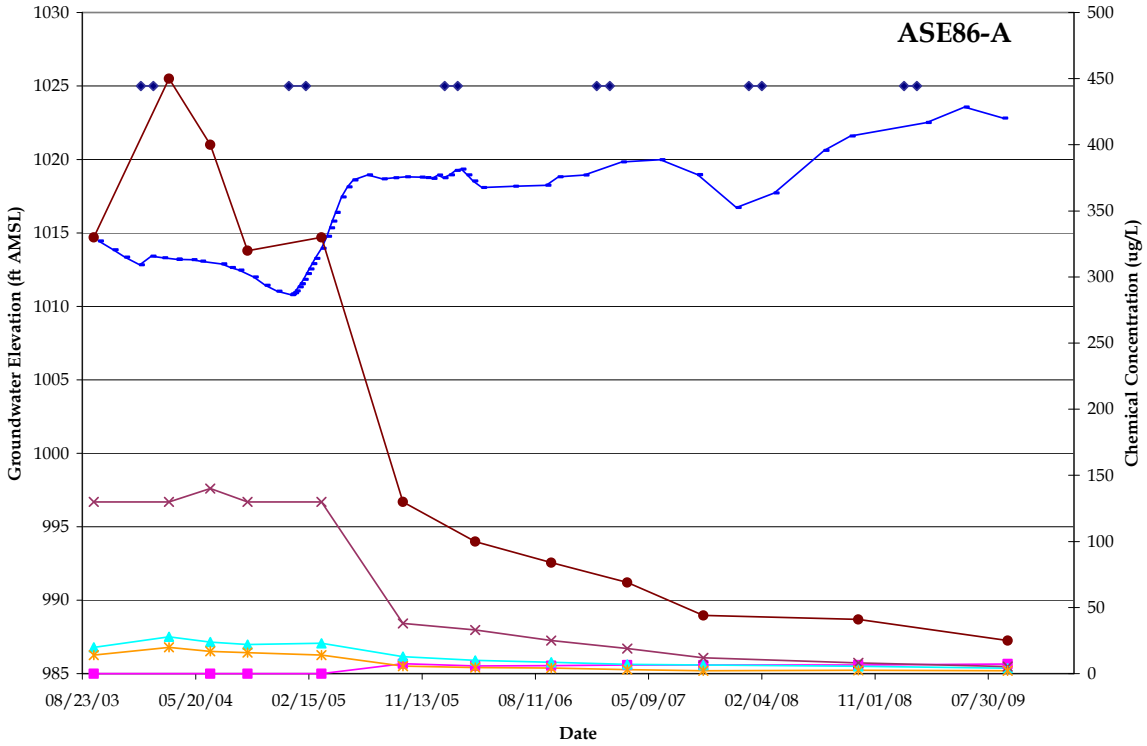


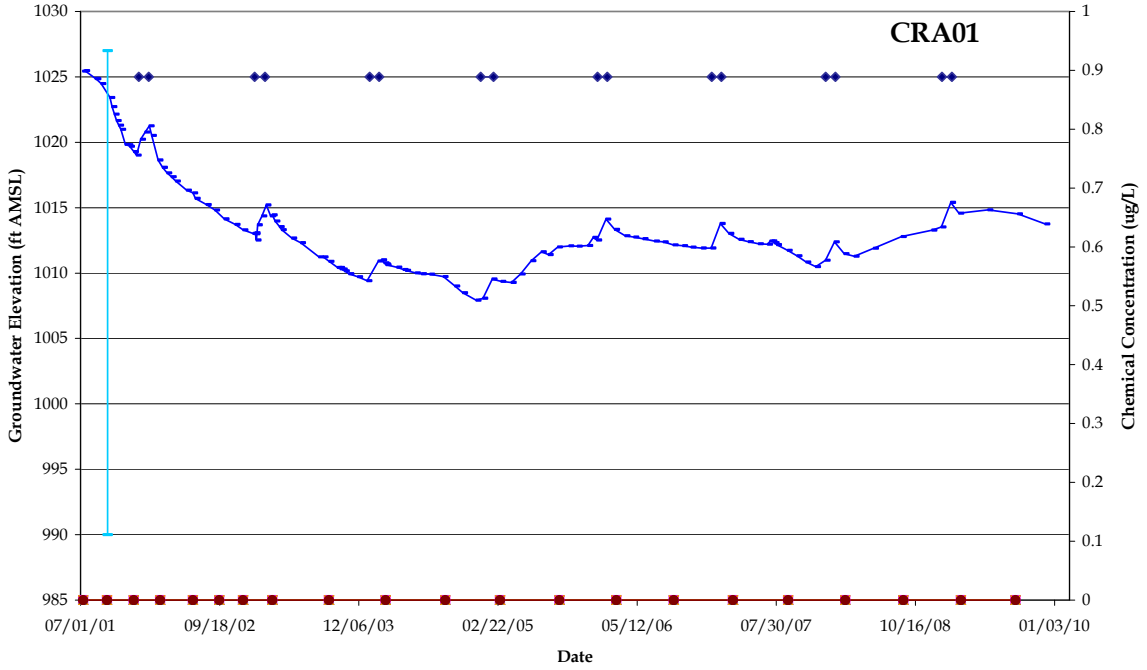
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA





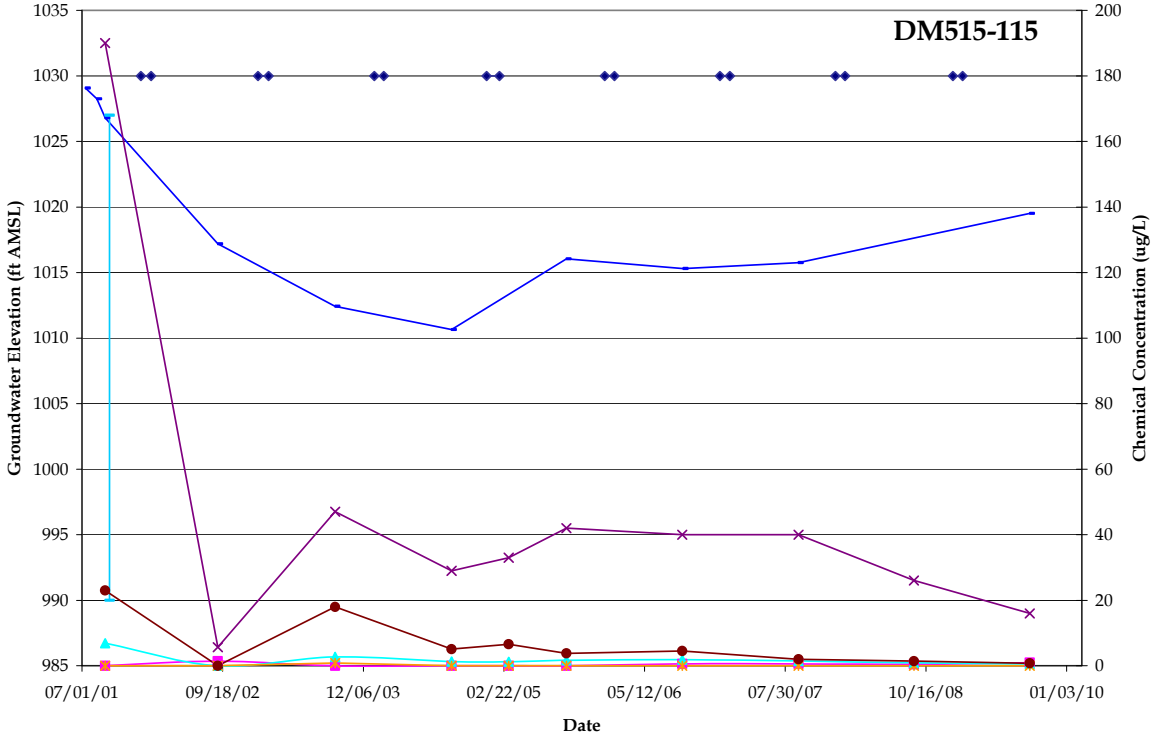
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

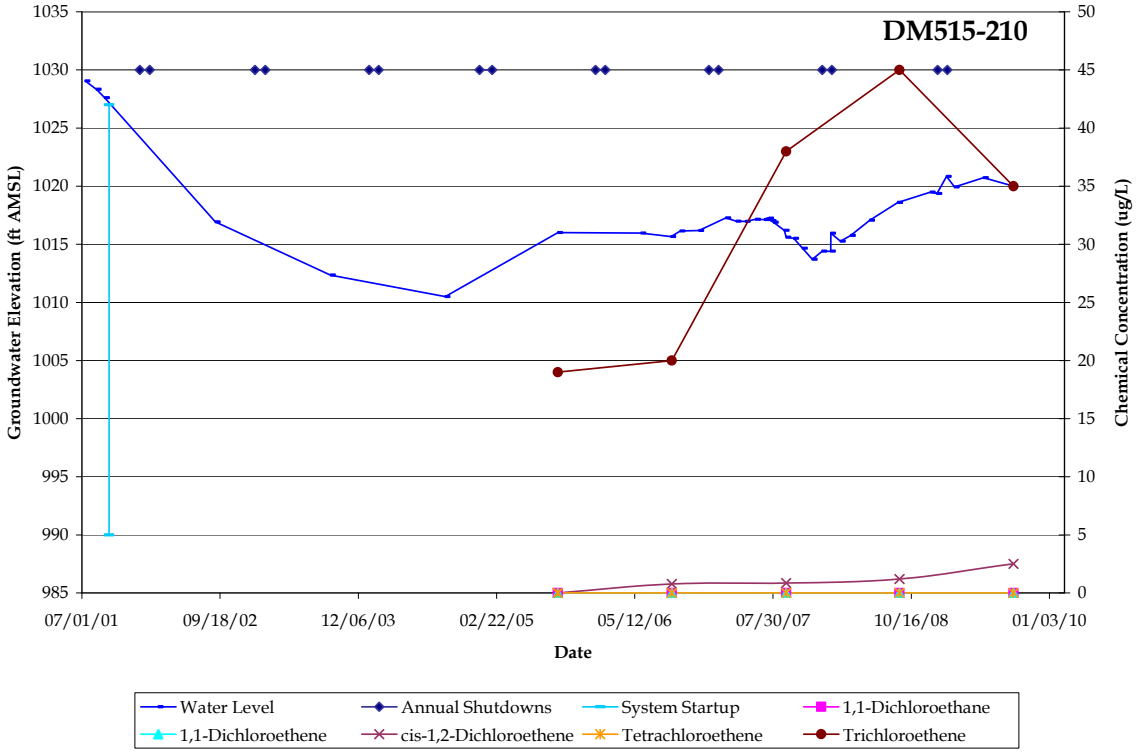




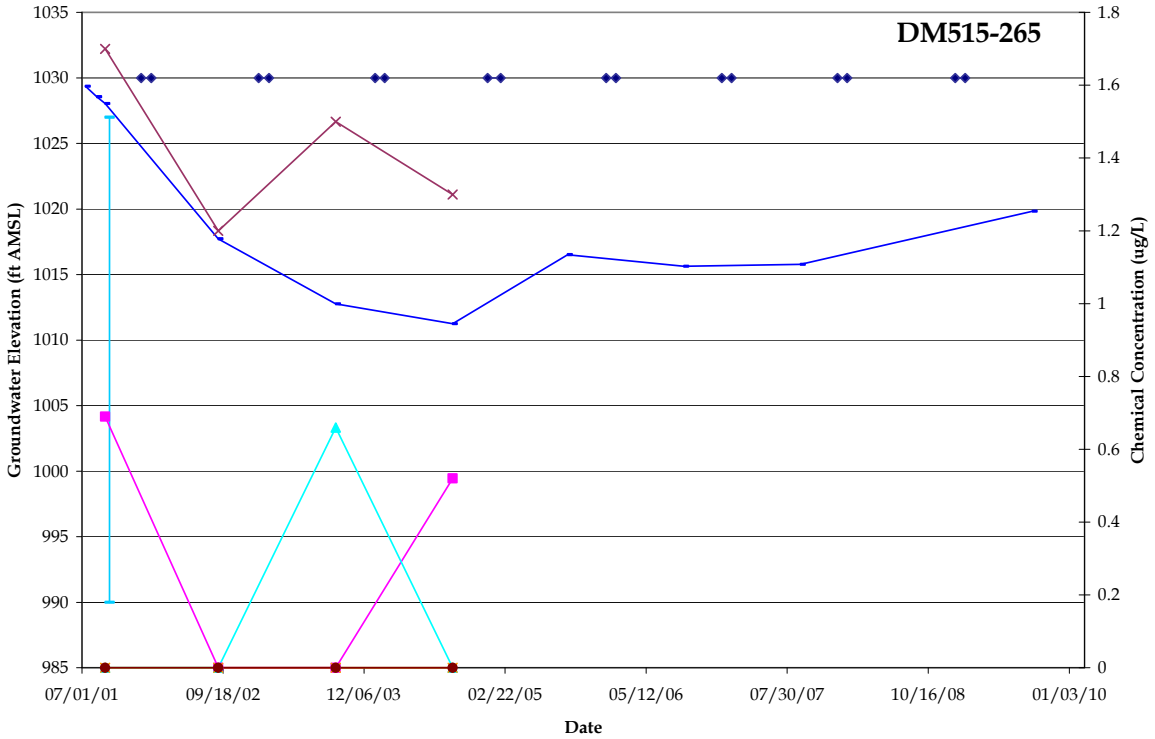
Water Level | Annual Shutdowns | System Startup | 1,1-Dichloroethane
1,1-Dichloroethene | cis-1,2-Dichloroethene | Tetrachloroethene | Trichloroethene

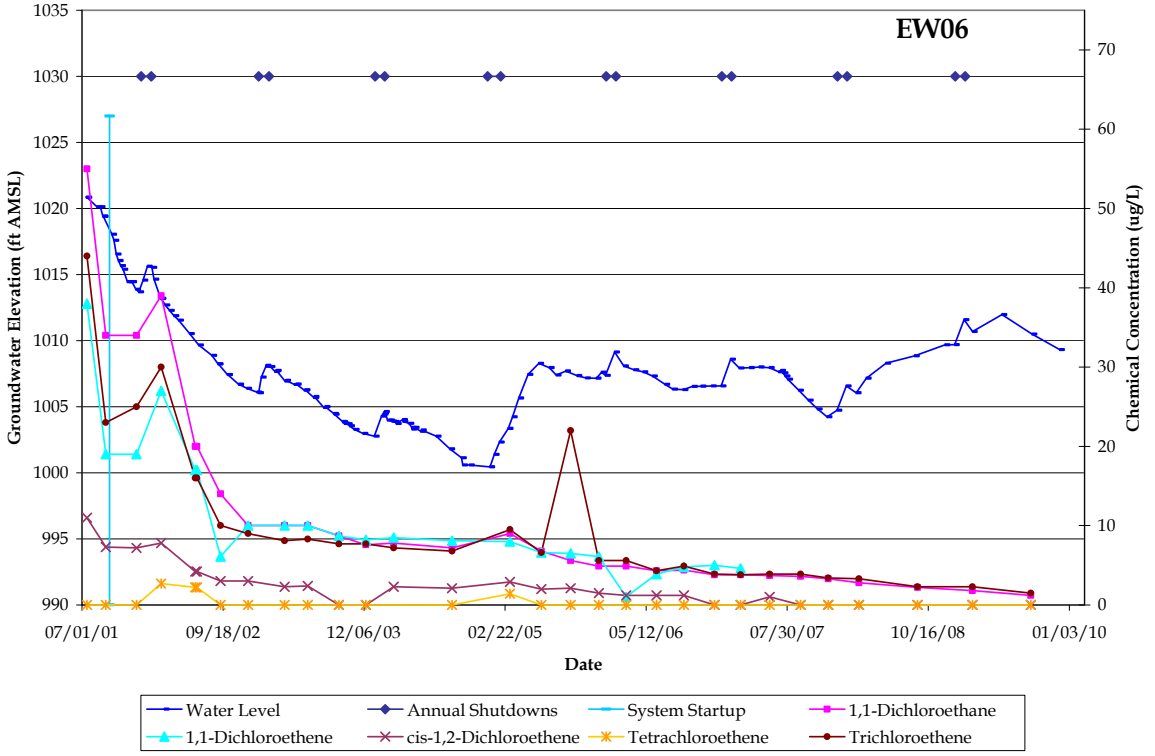
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



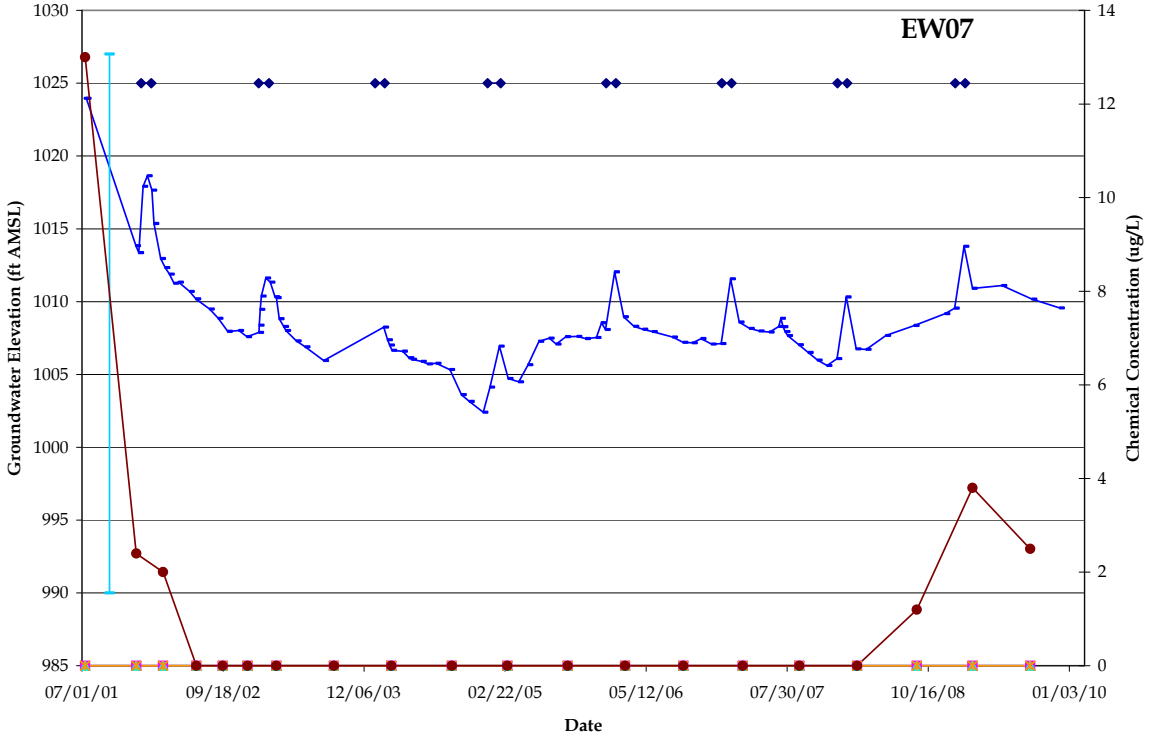


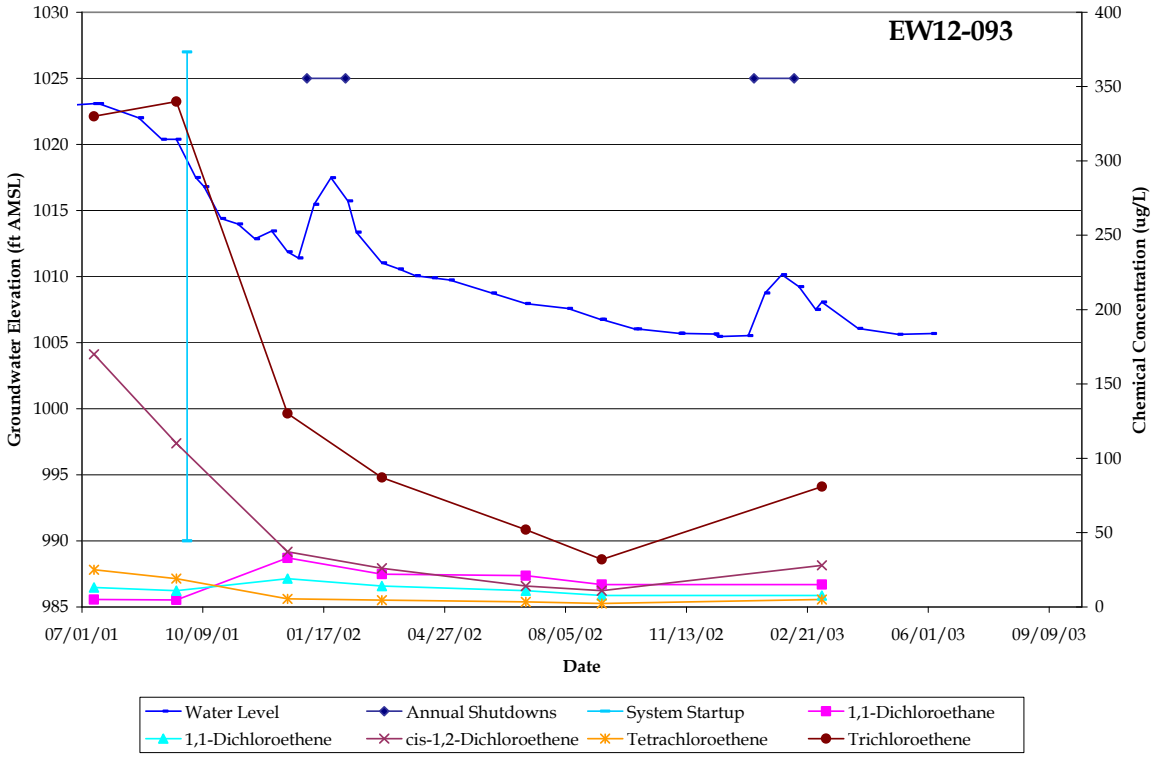
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



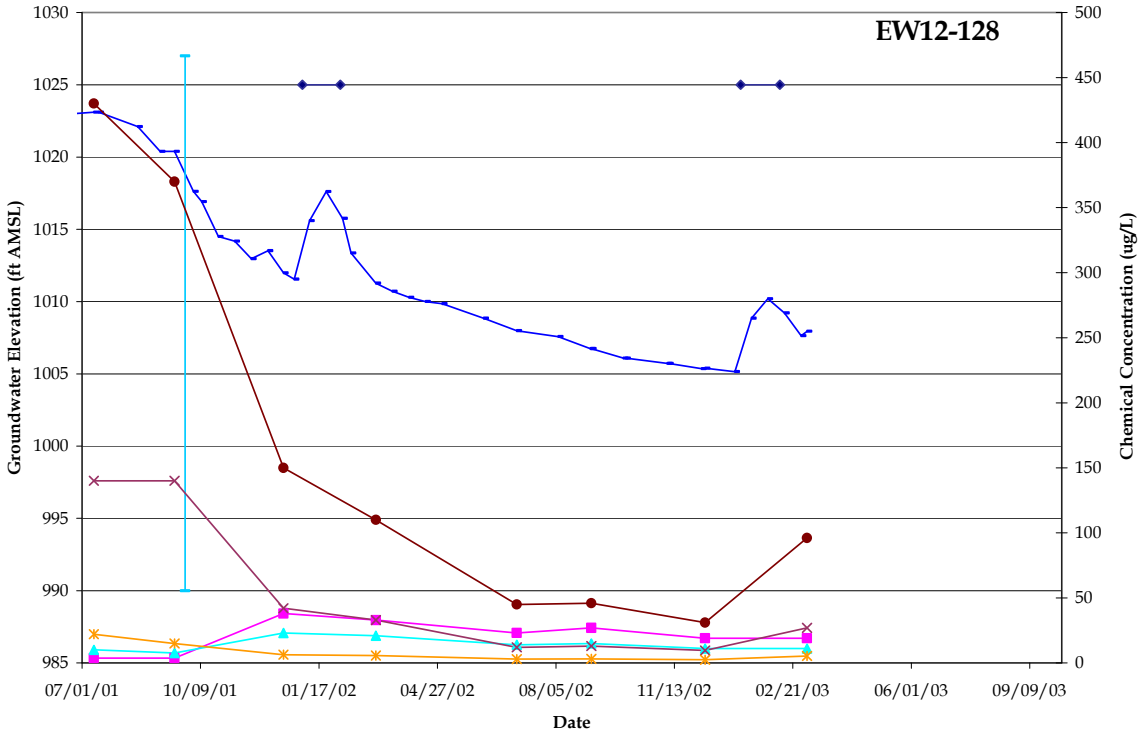


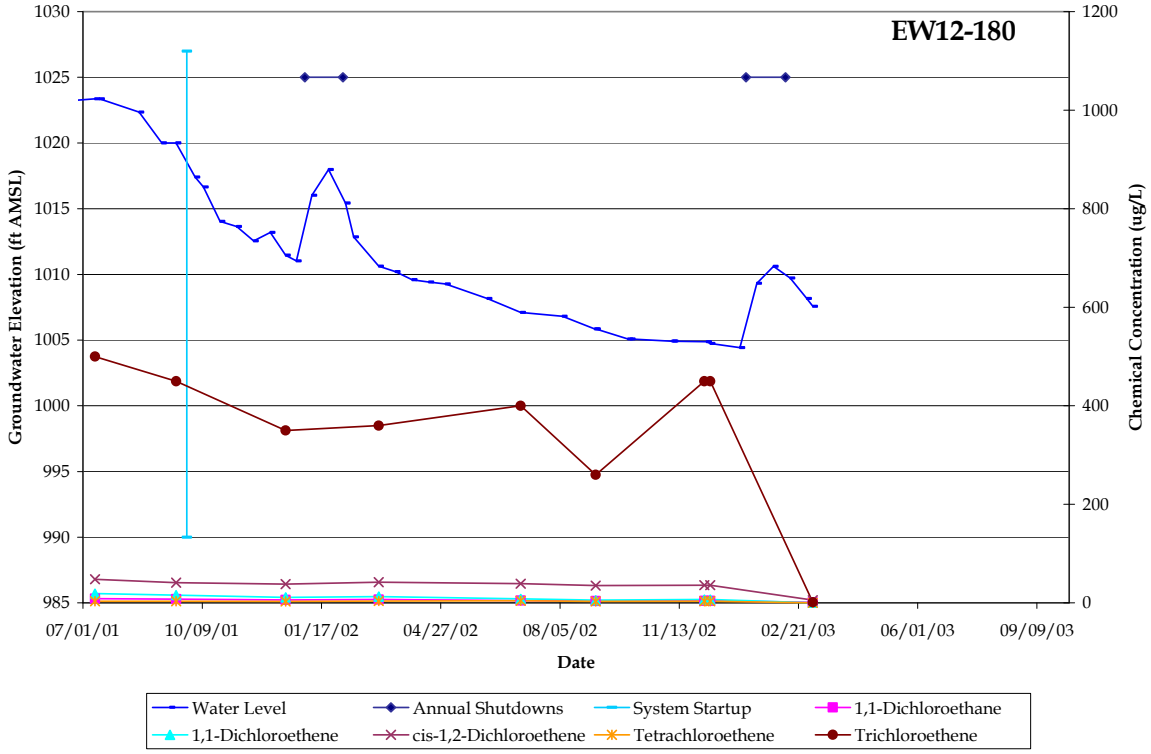
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



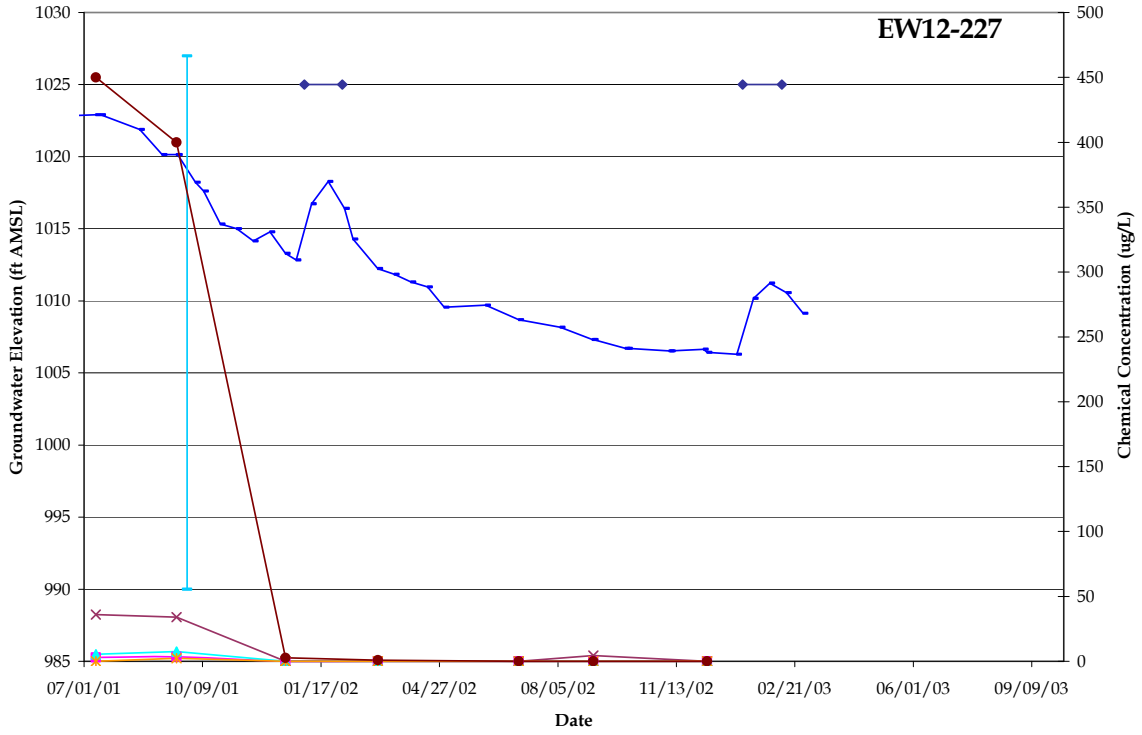


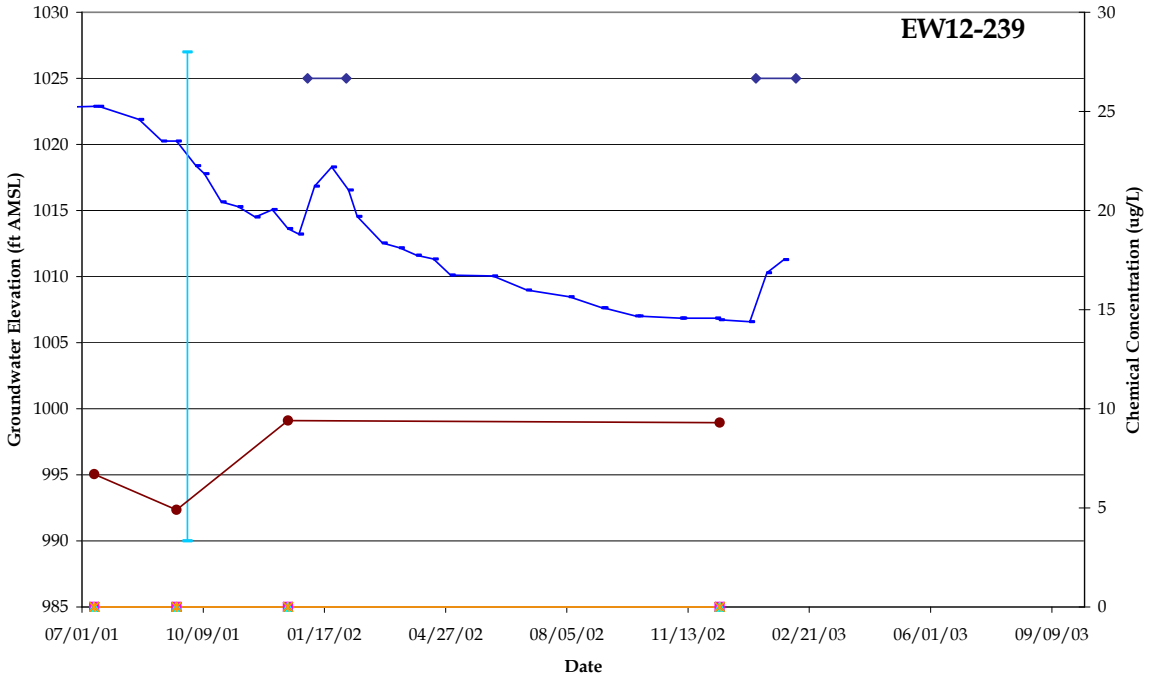
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



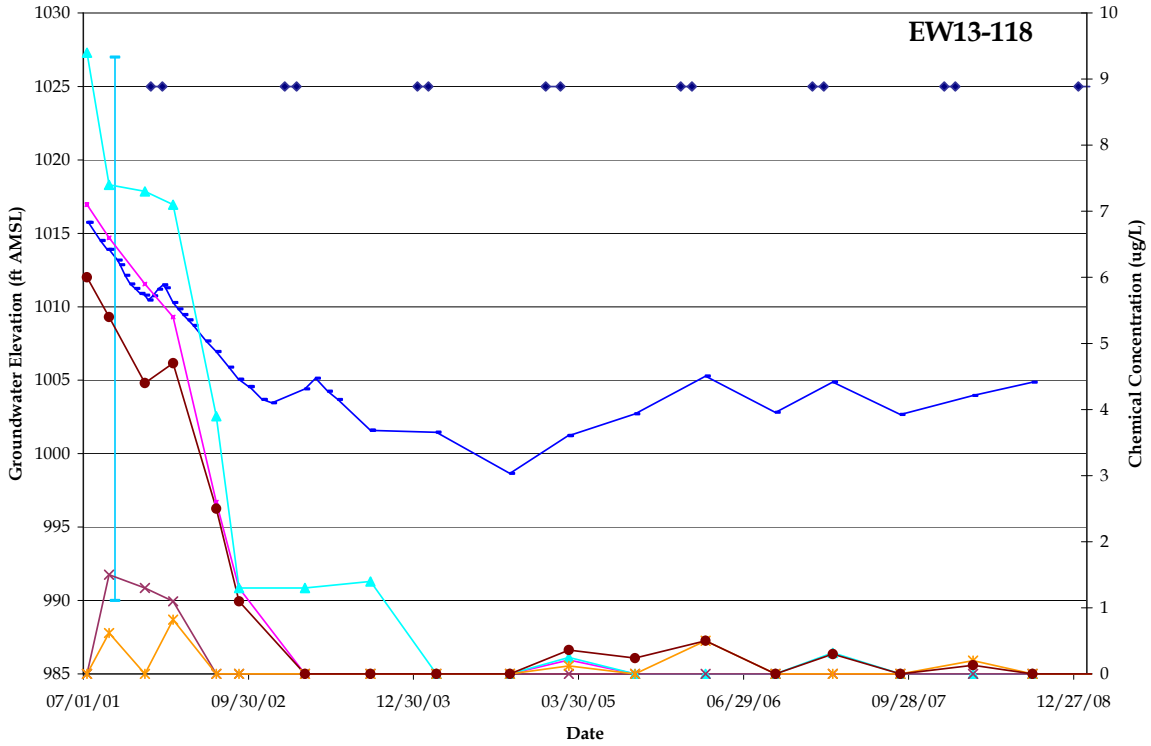


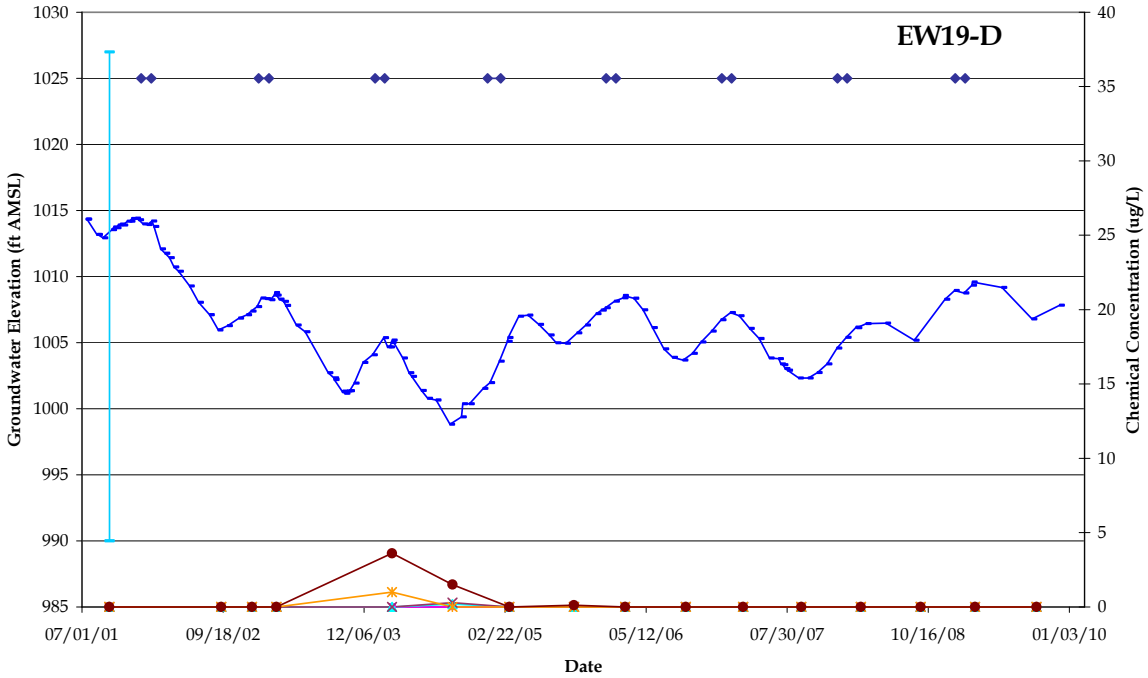
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



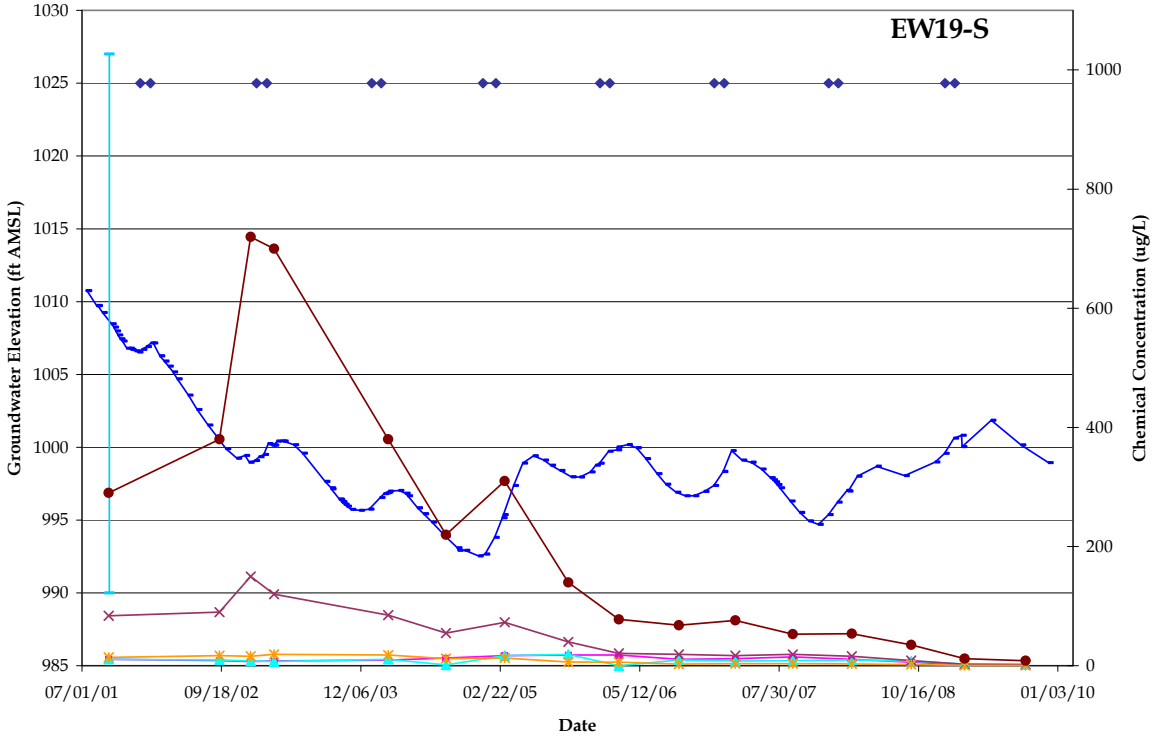


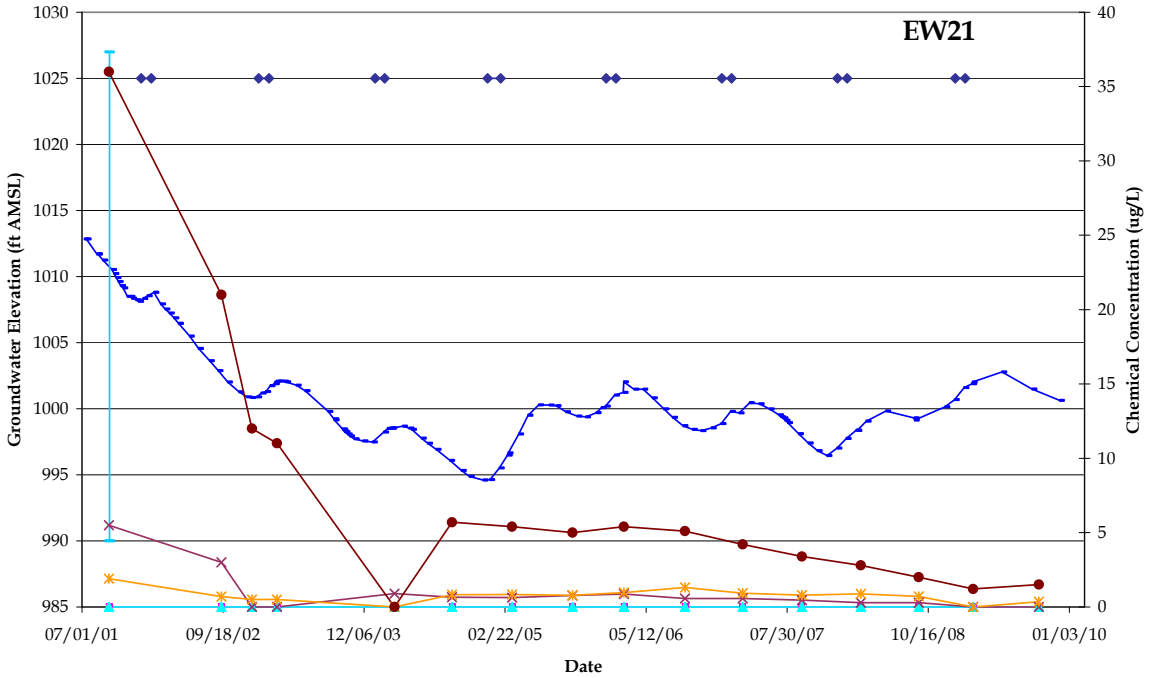
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



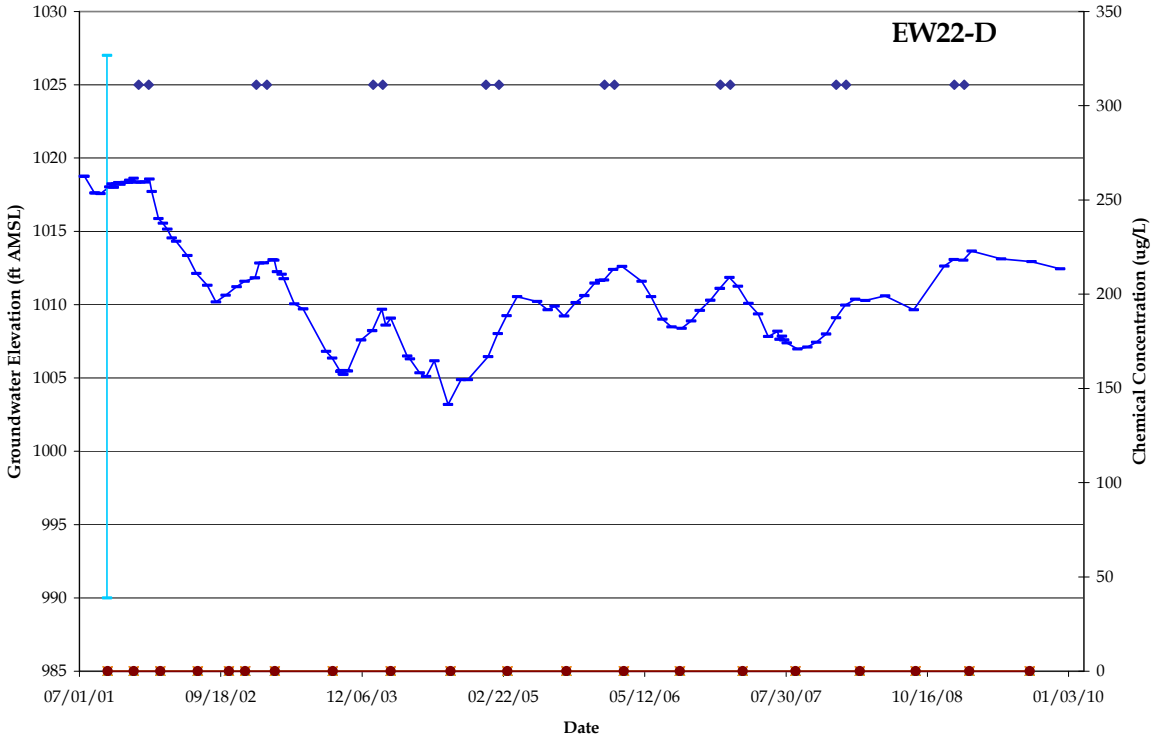


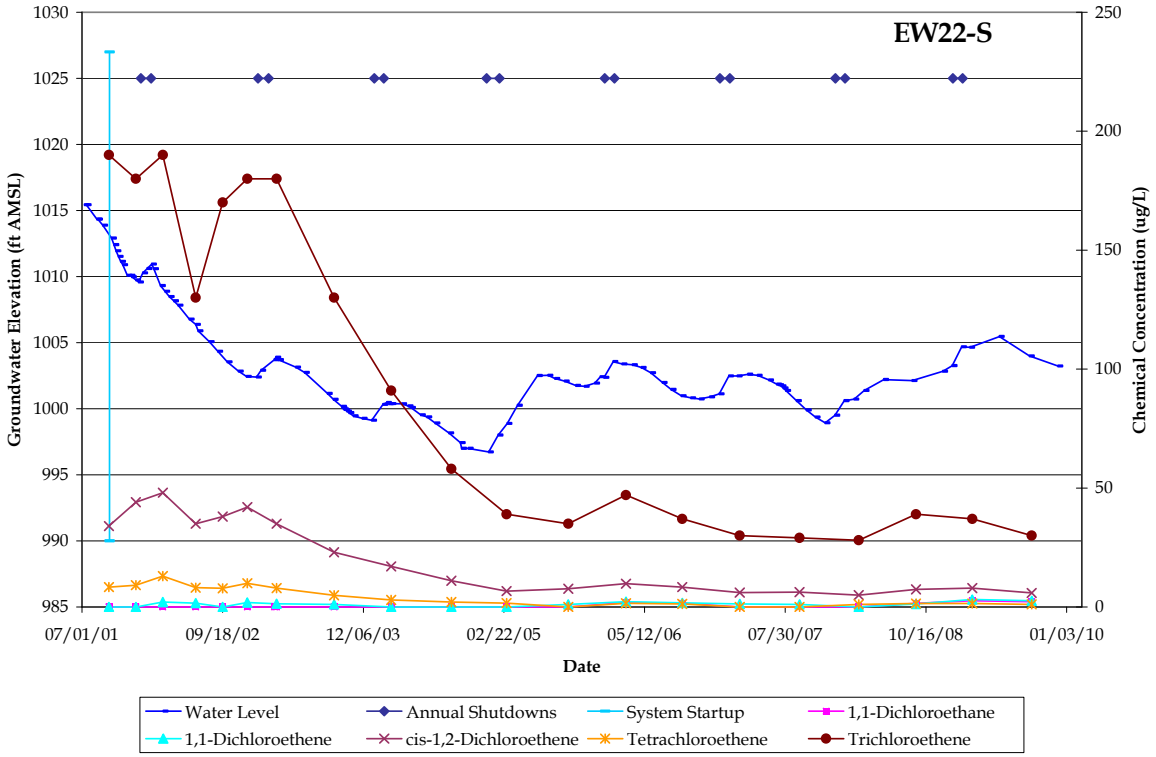
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



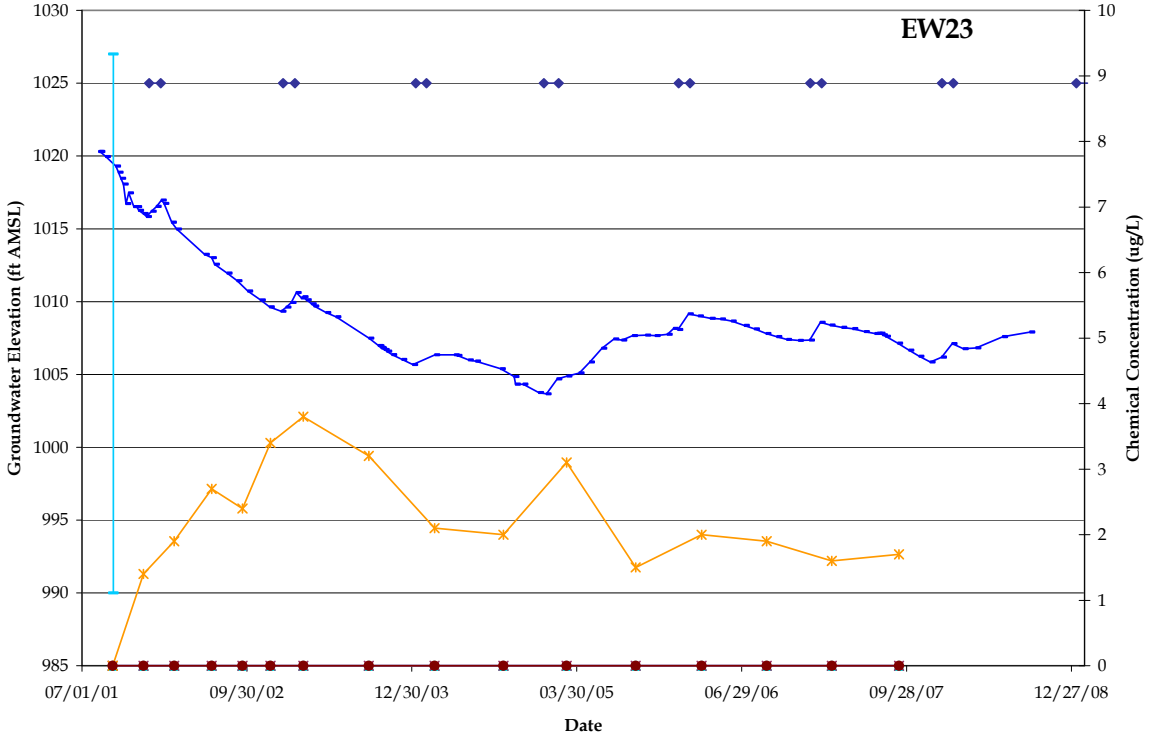


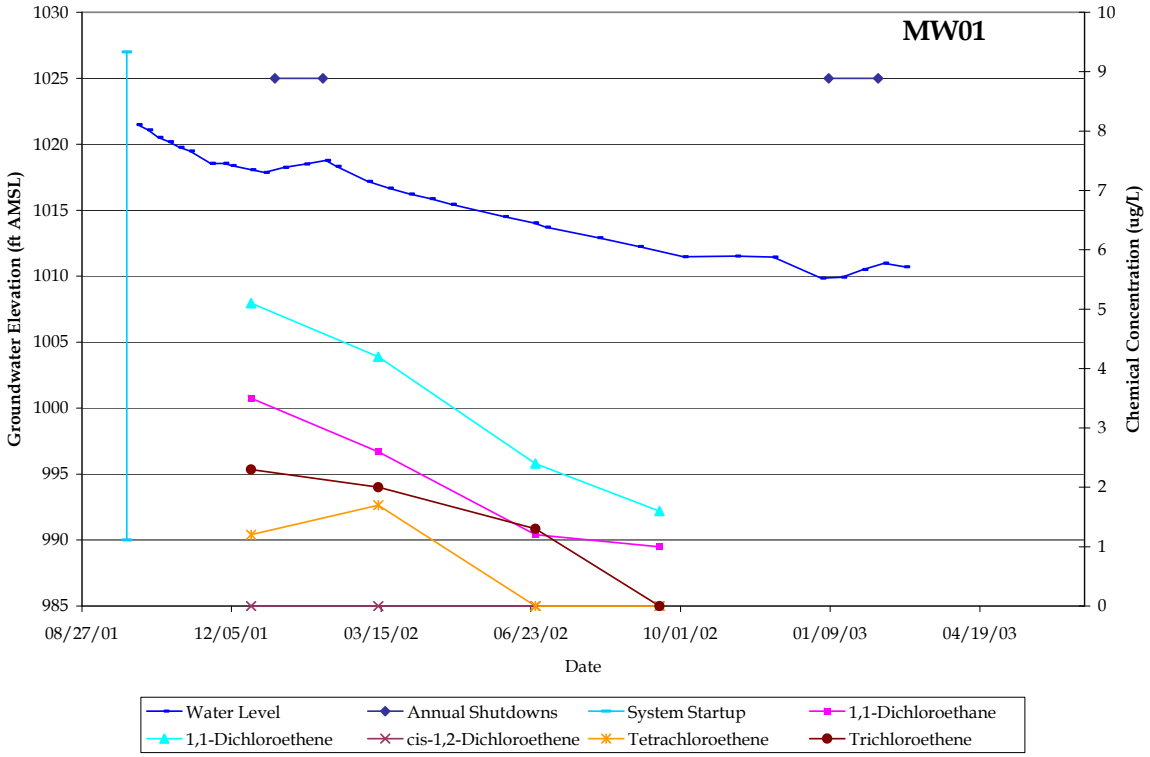
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



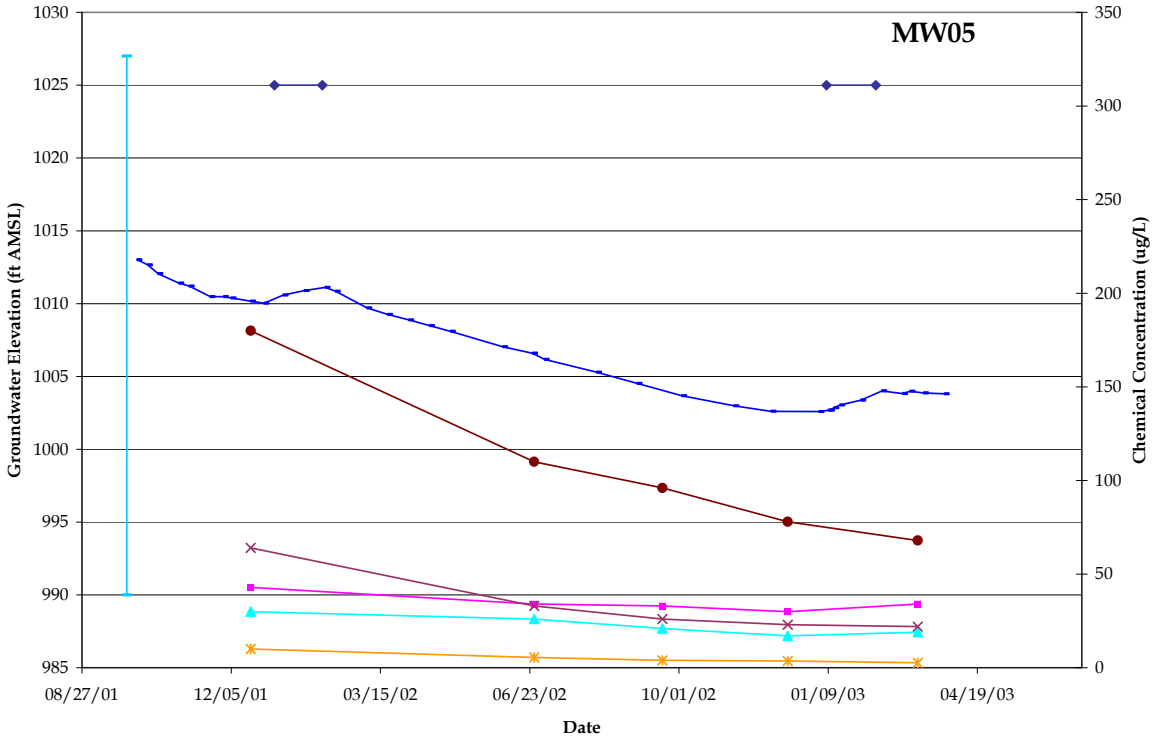


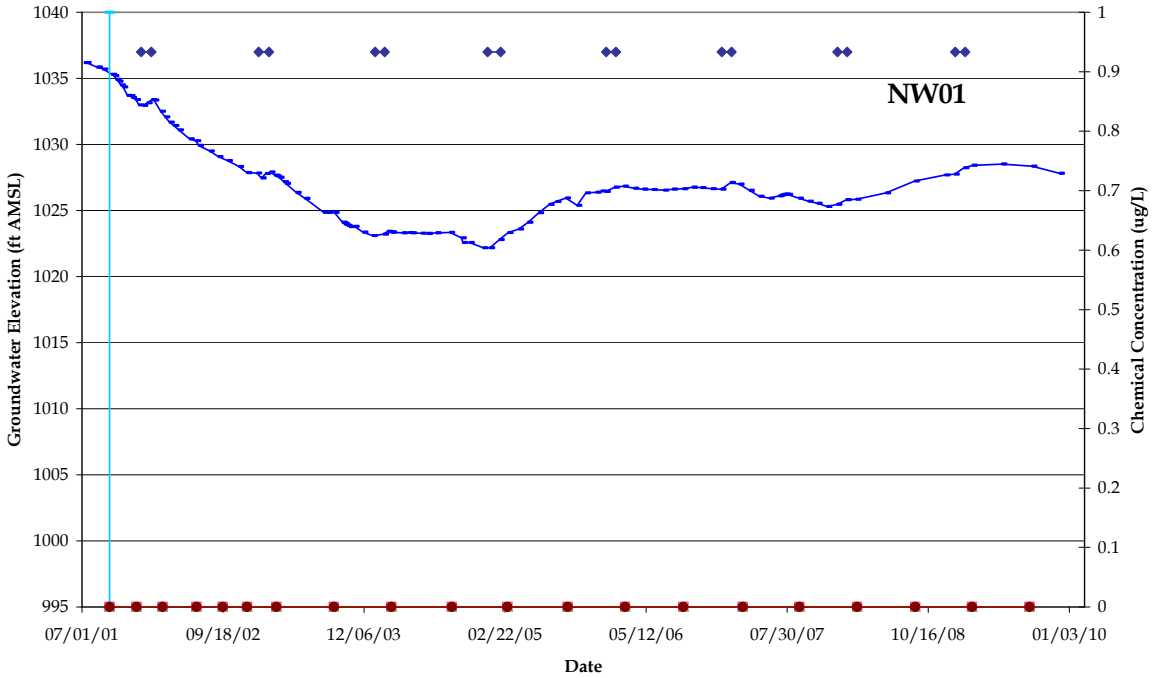
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



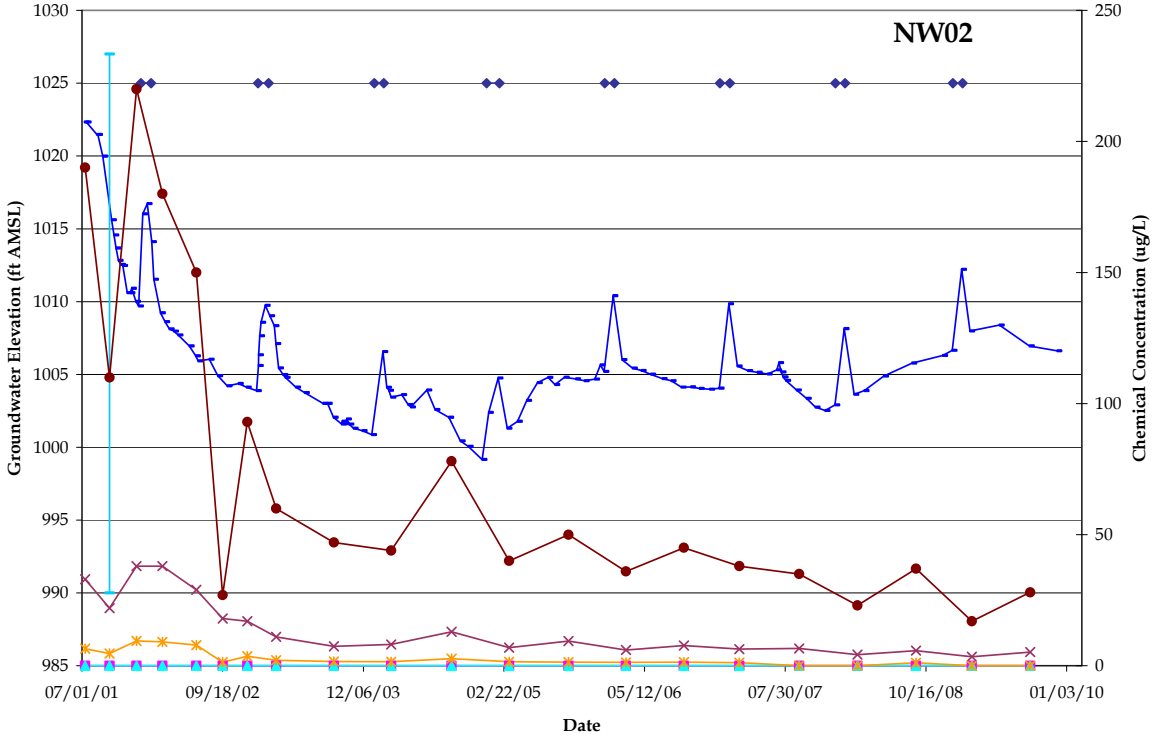


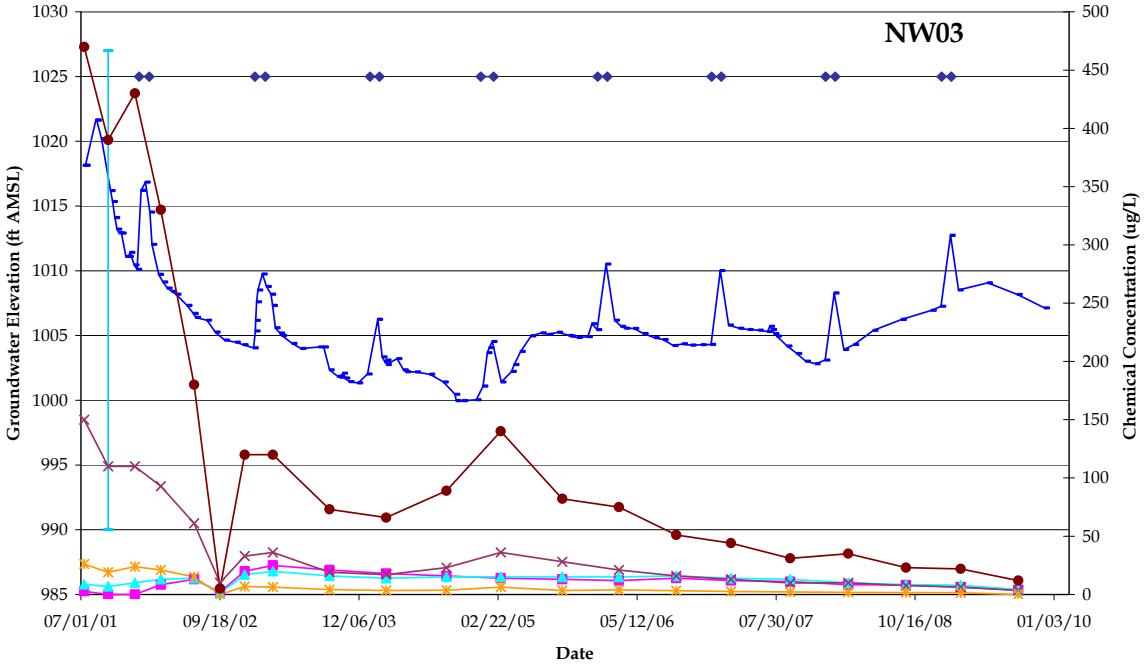
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



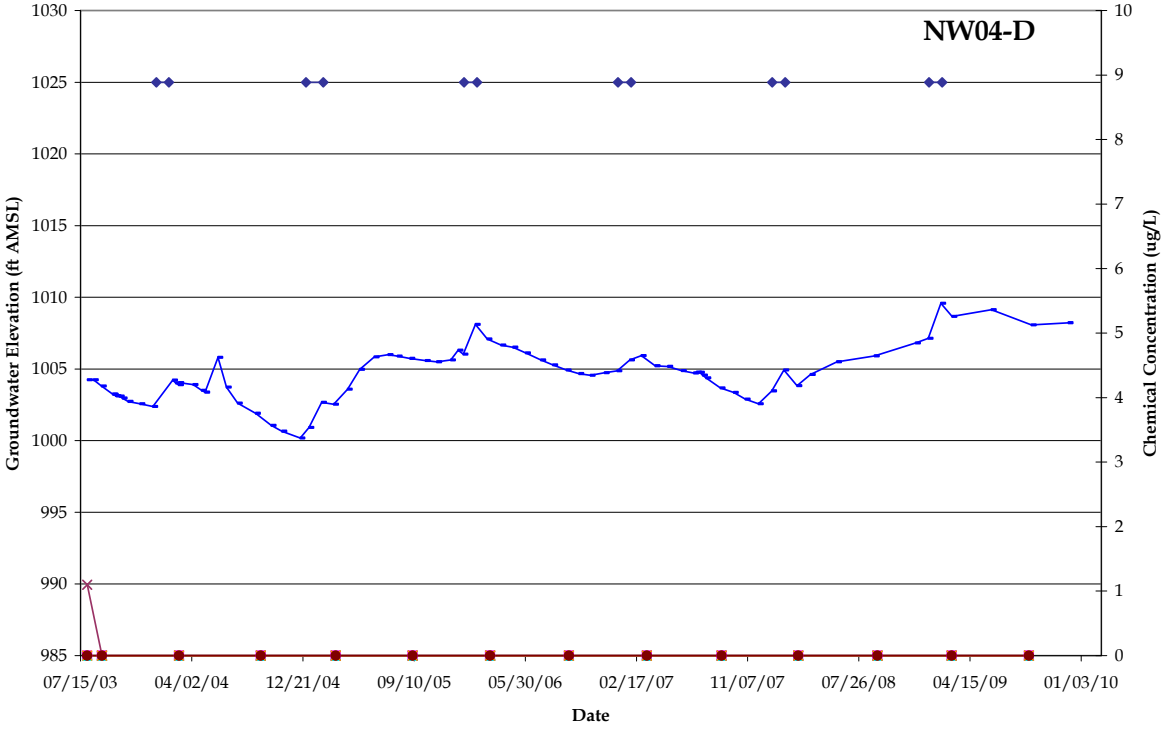


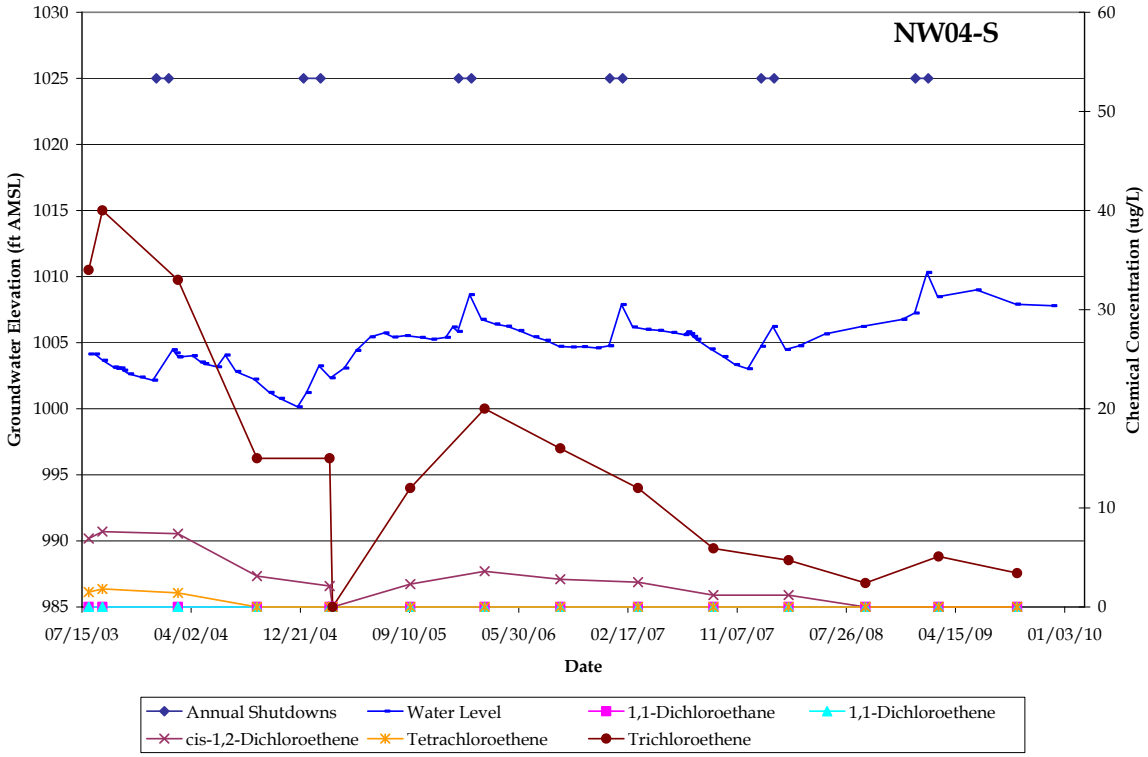
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



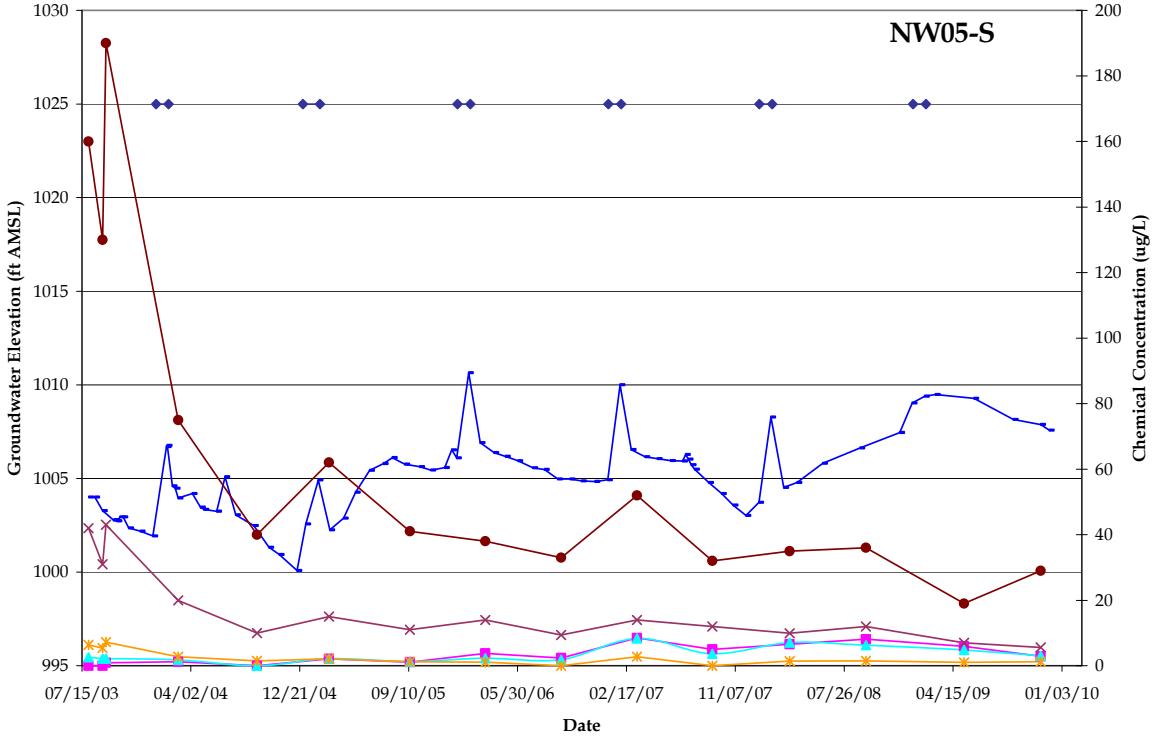


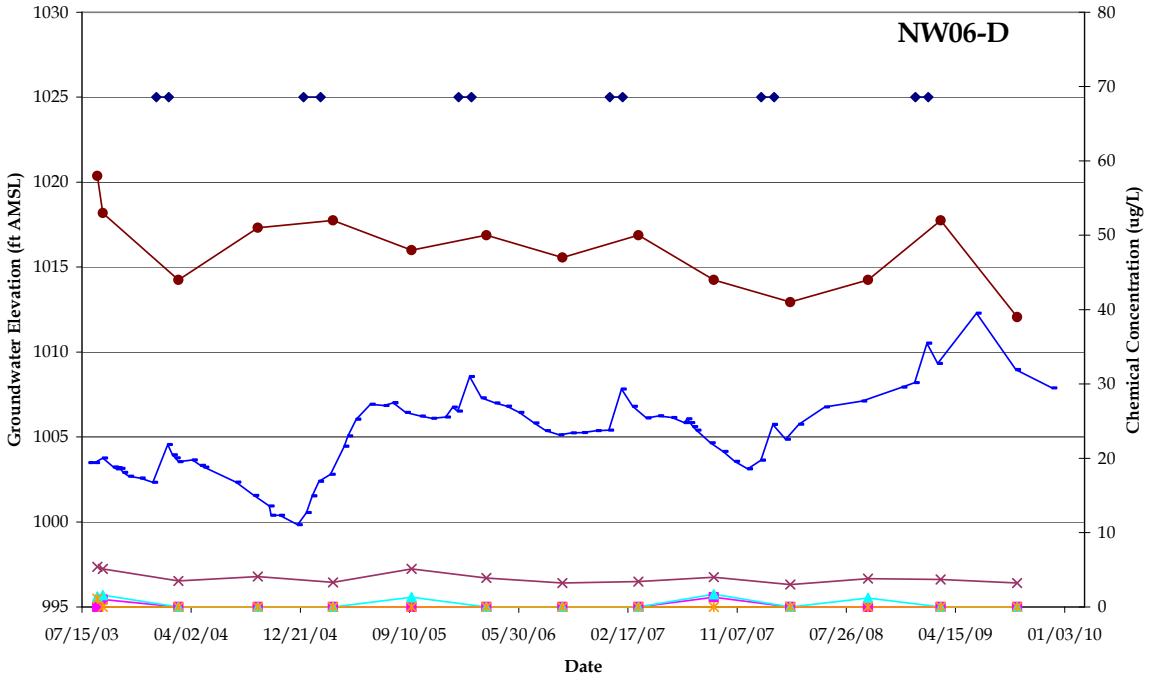
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



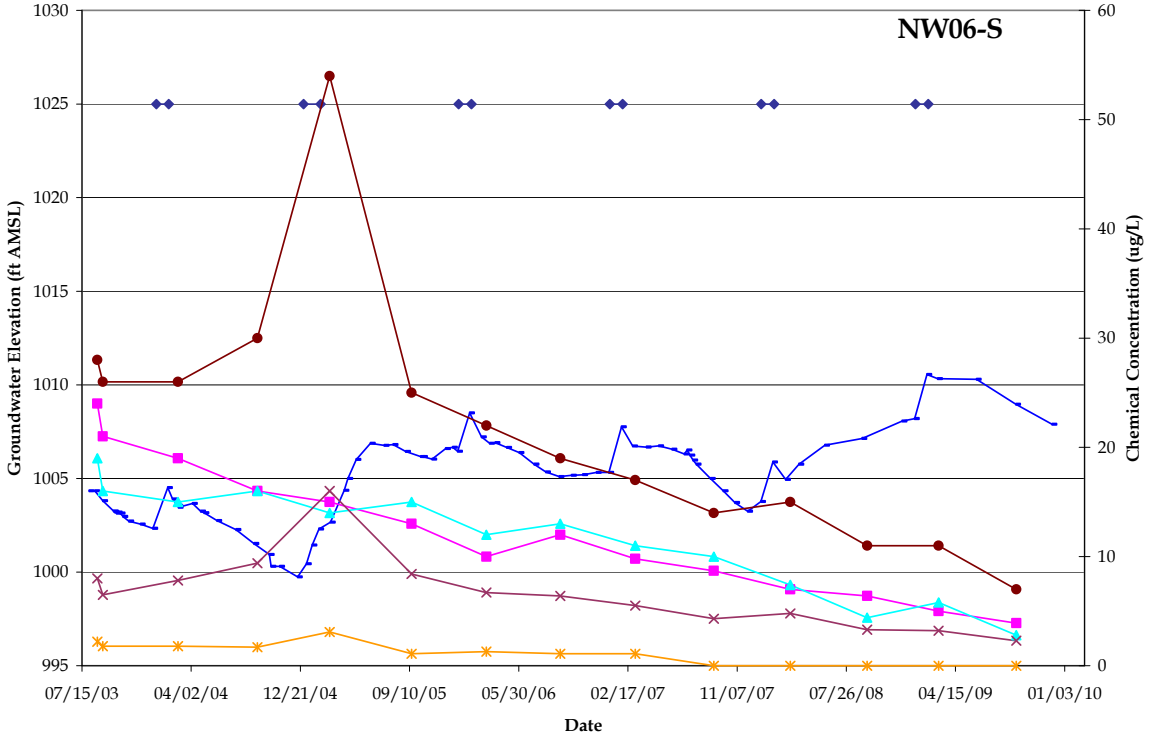


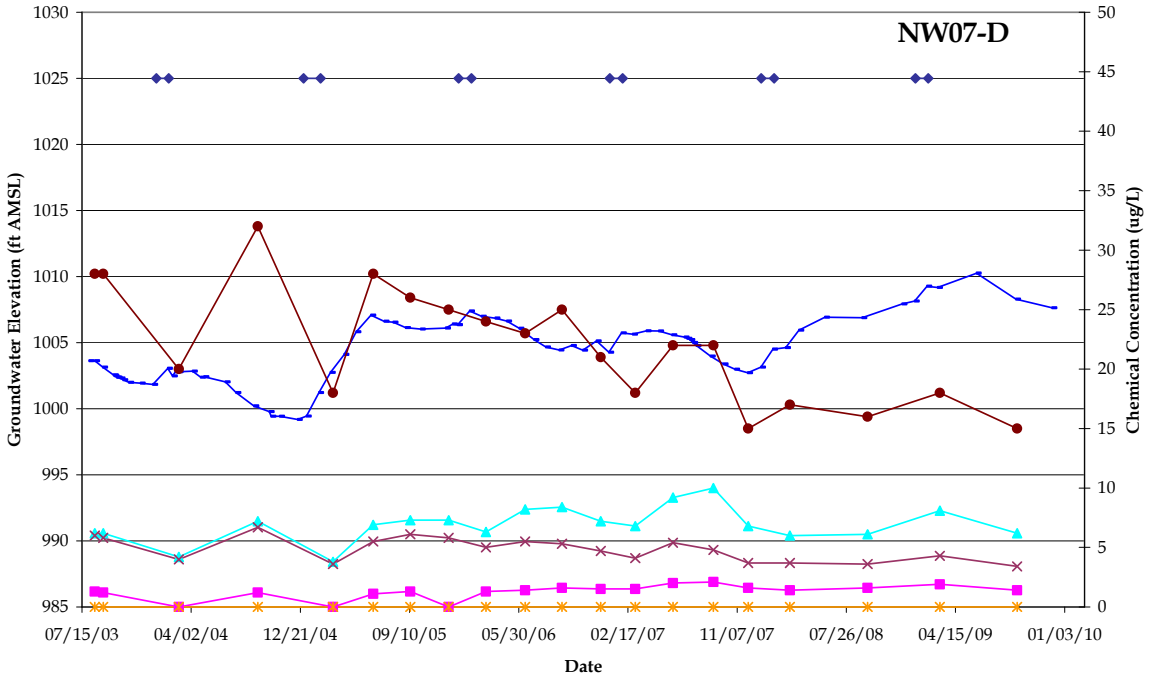
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



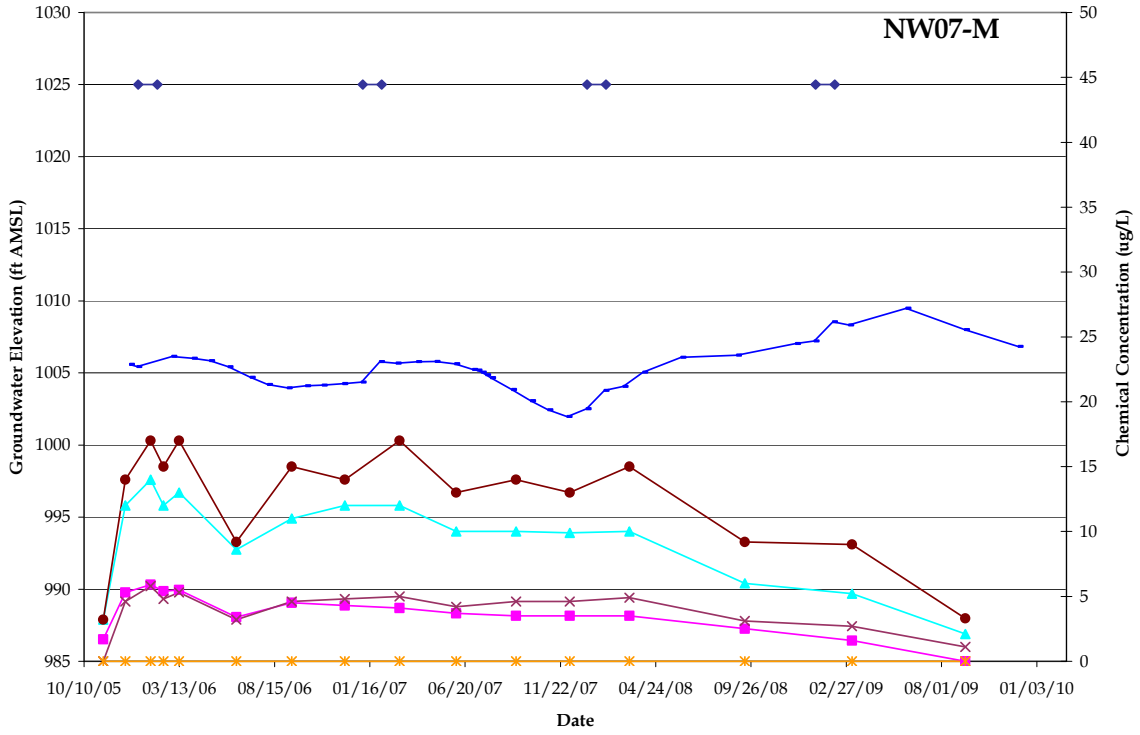


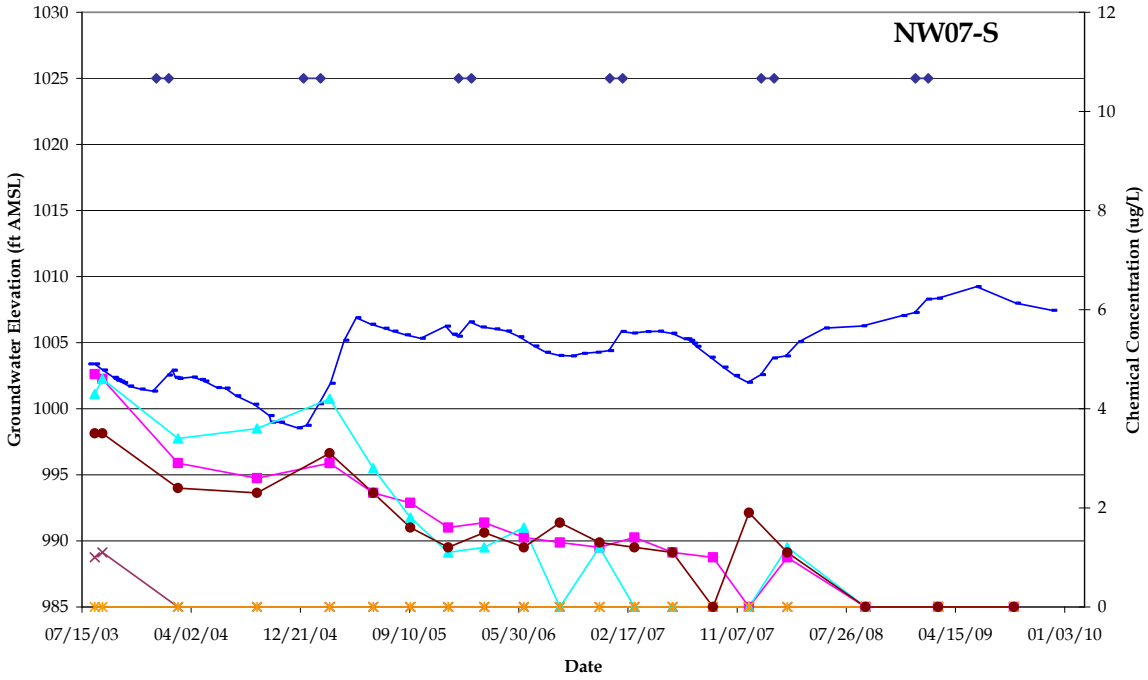
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



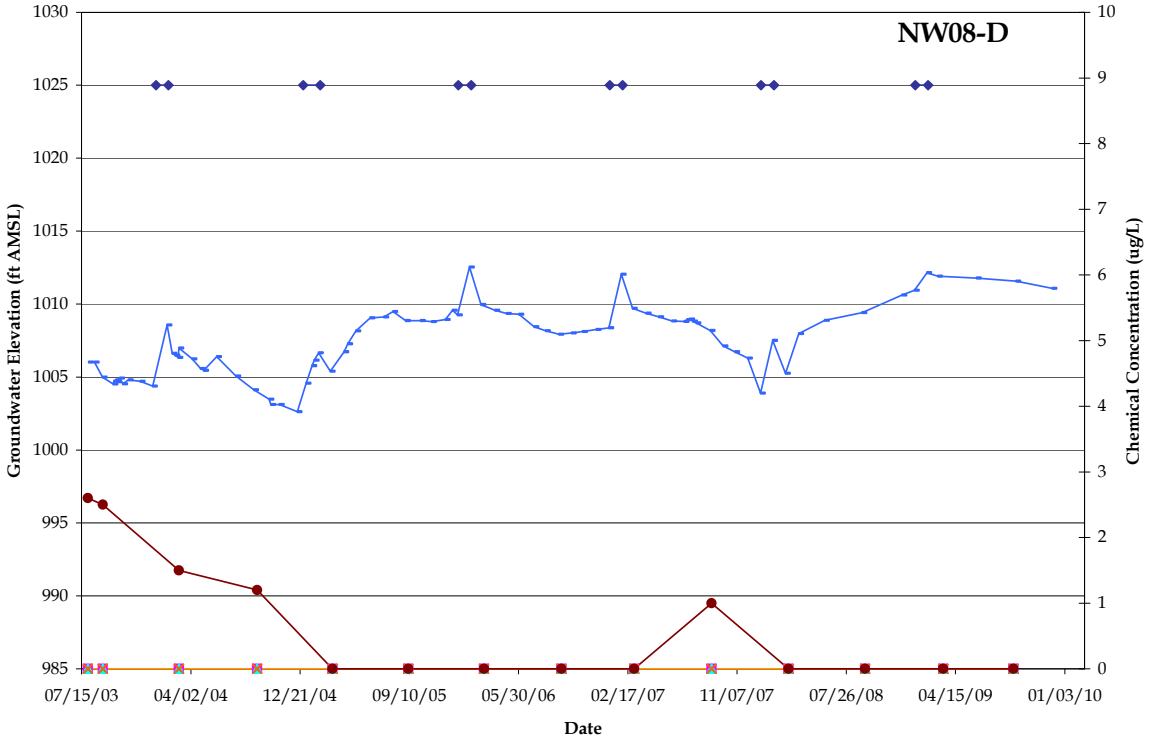


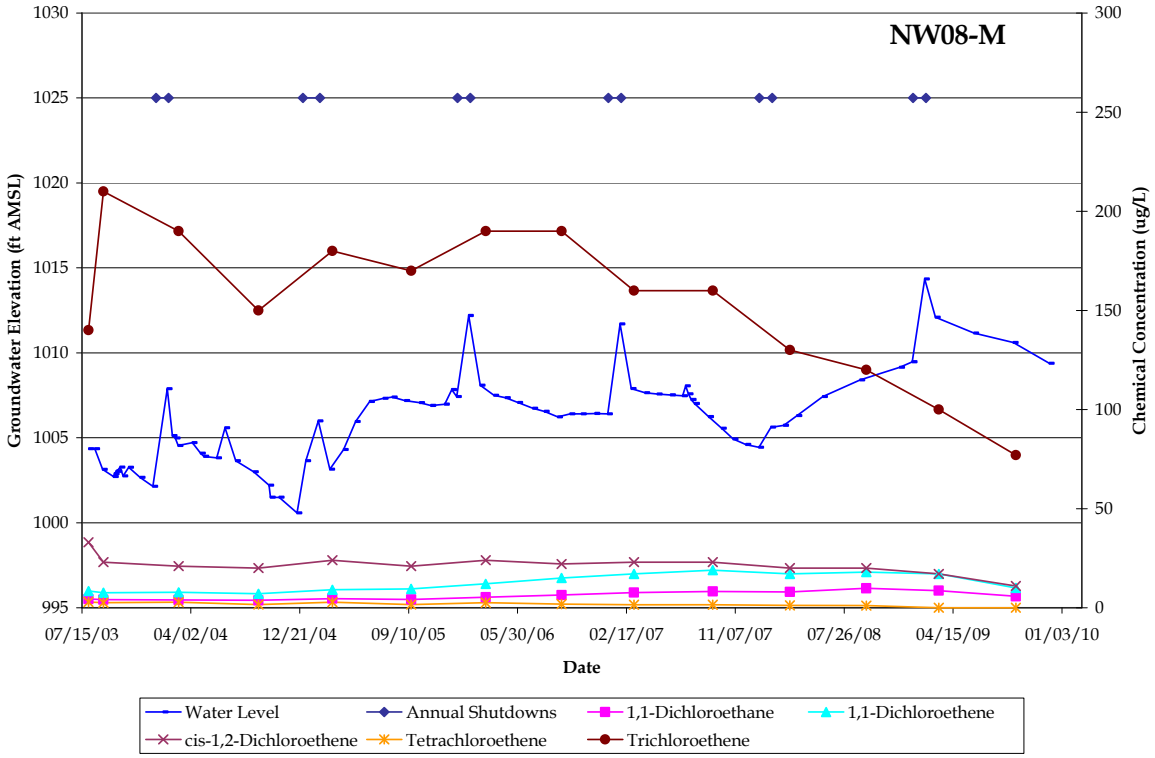
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



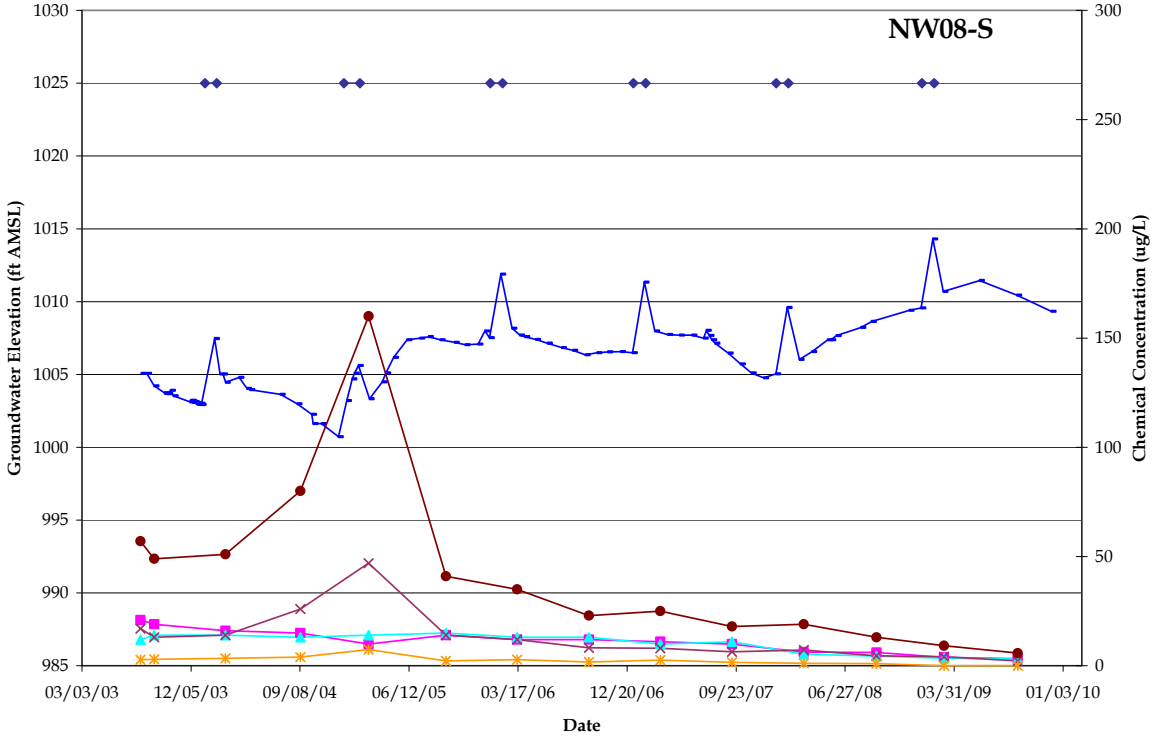


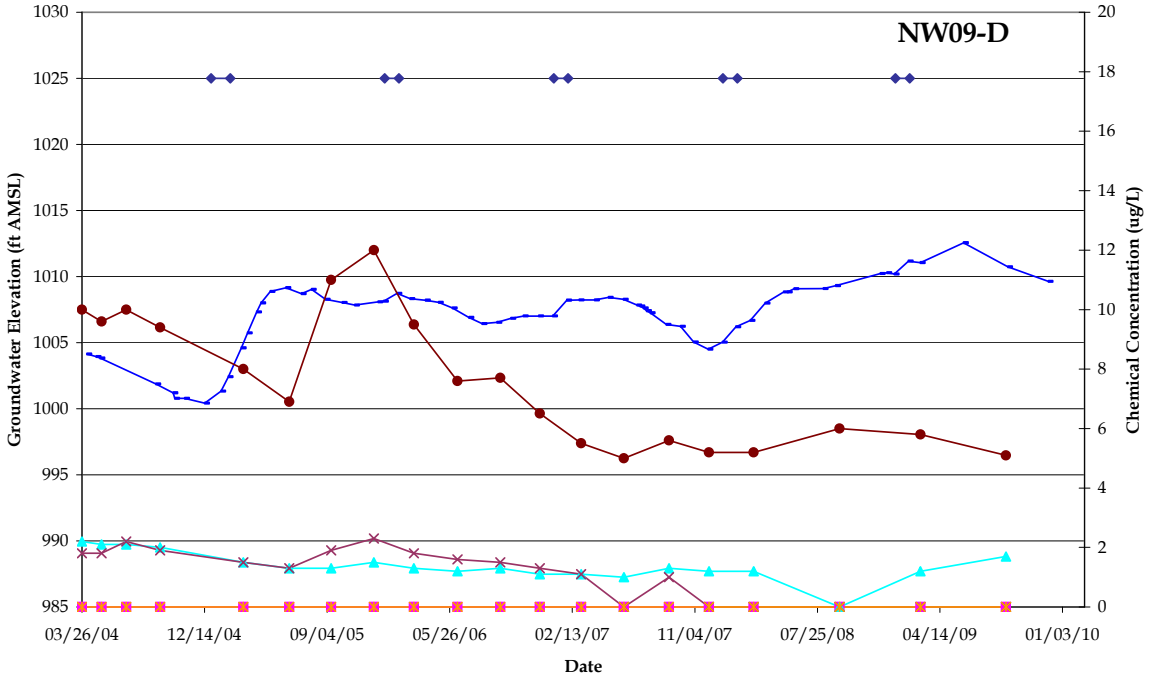
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



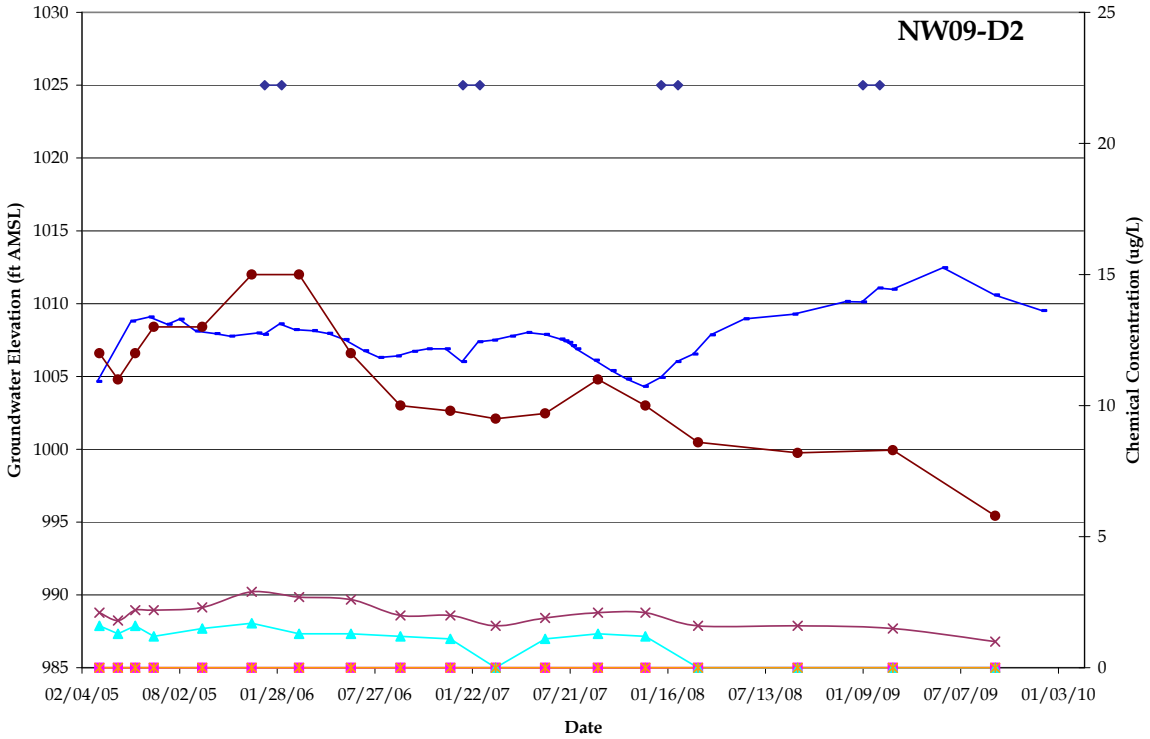


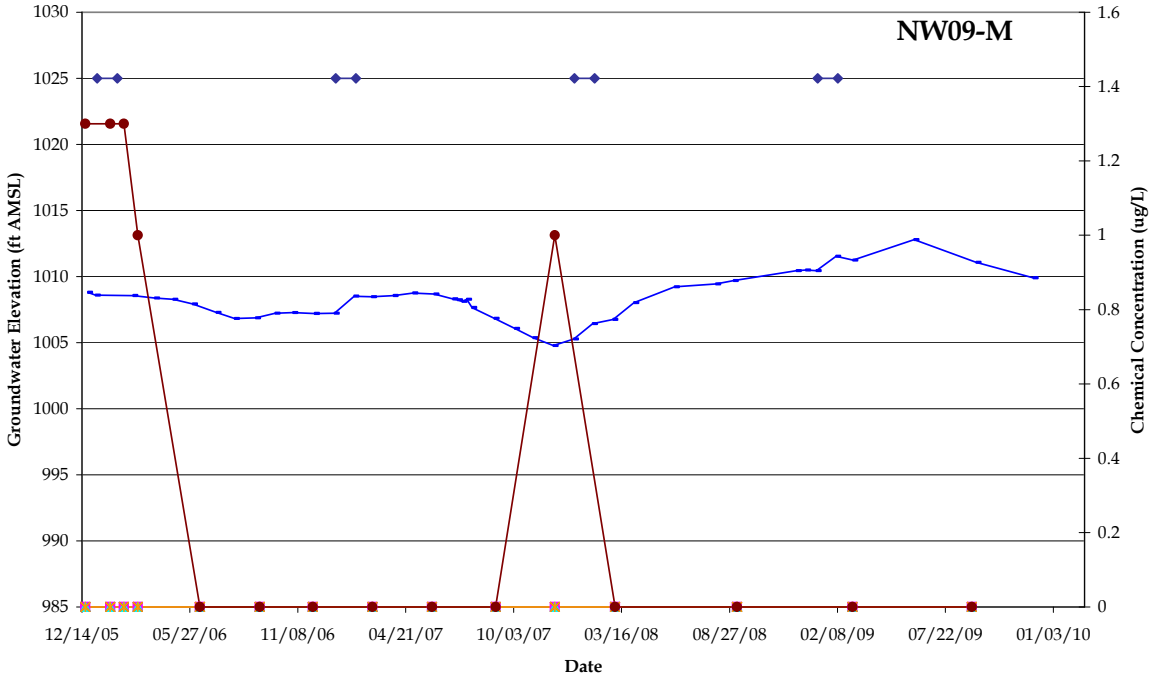
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



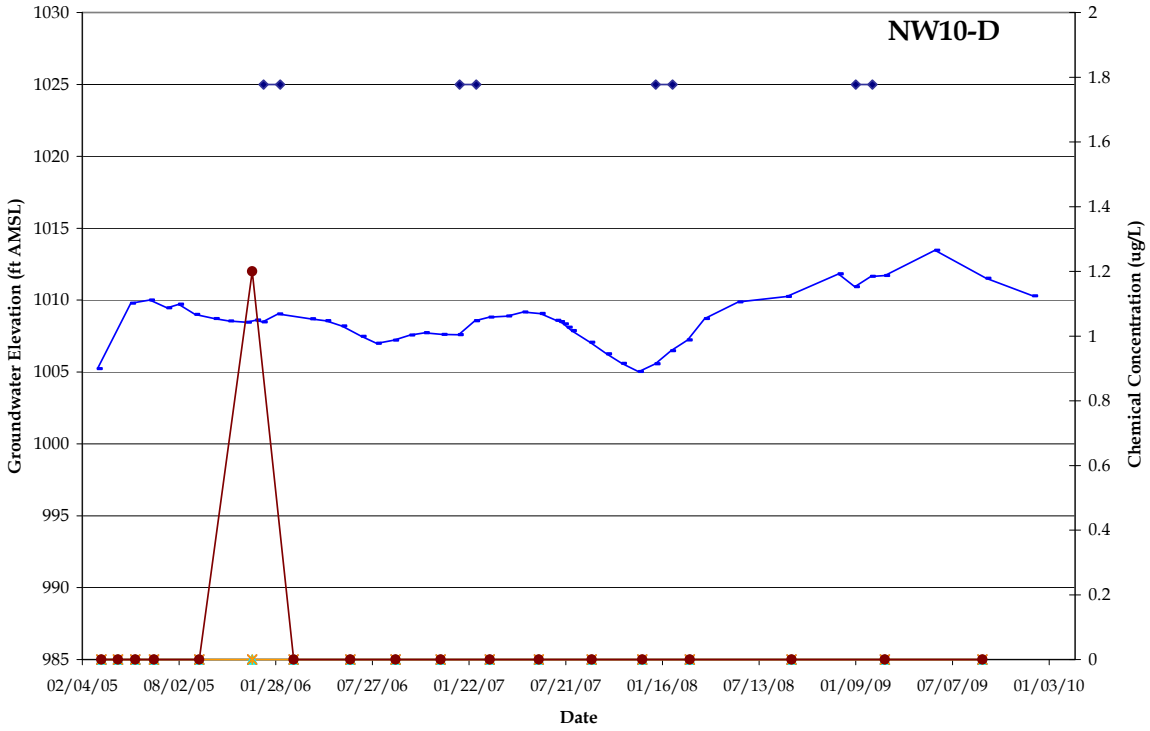


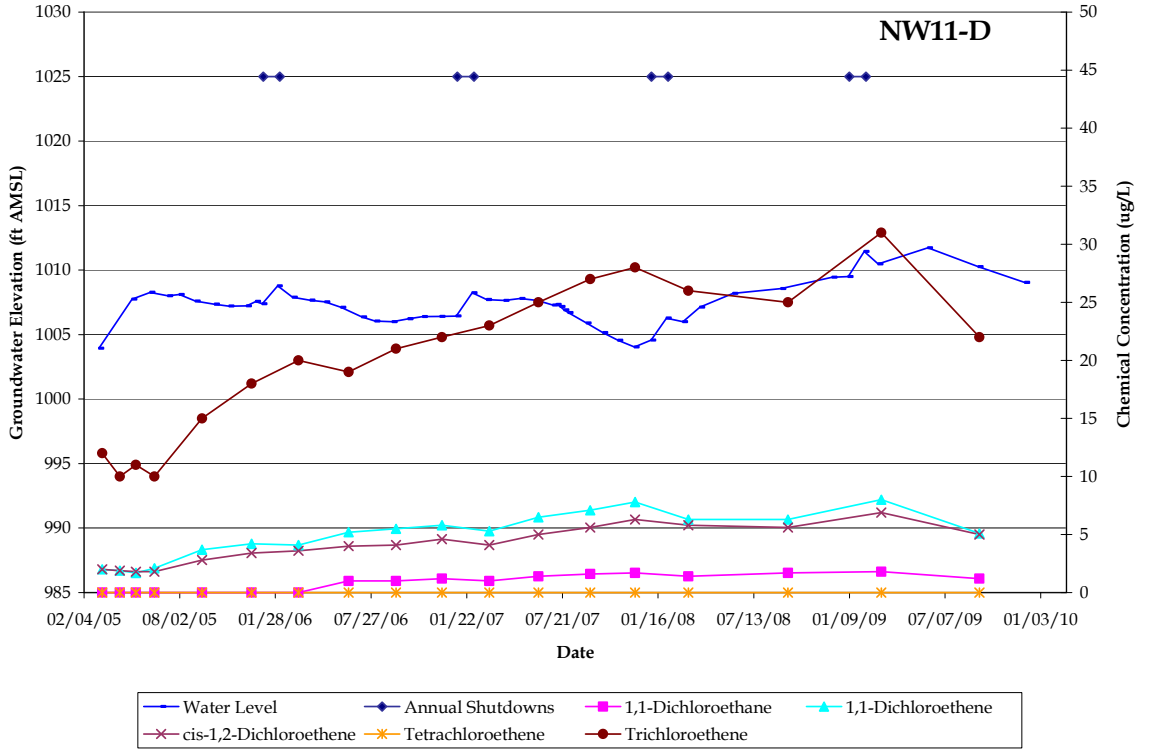
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



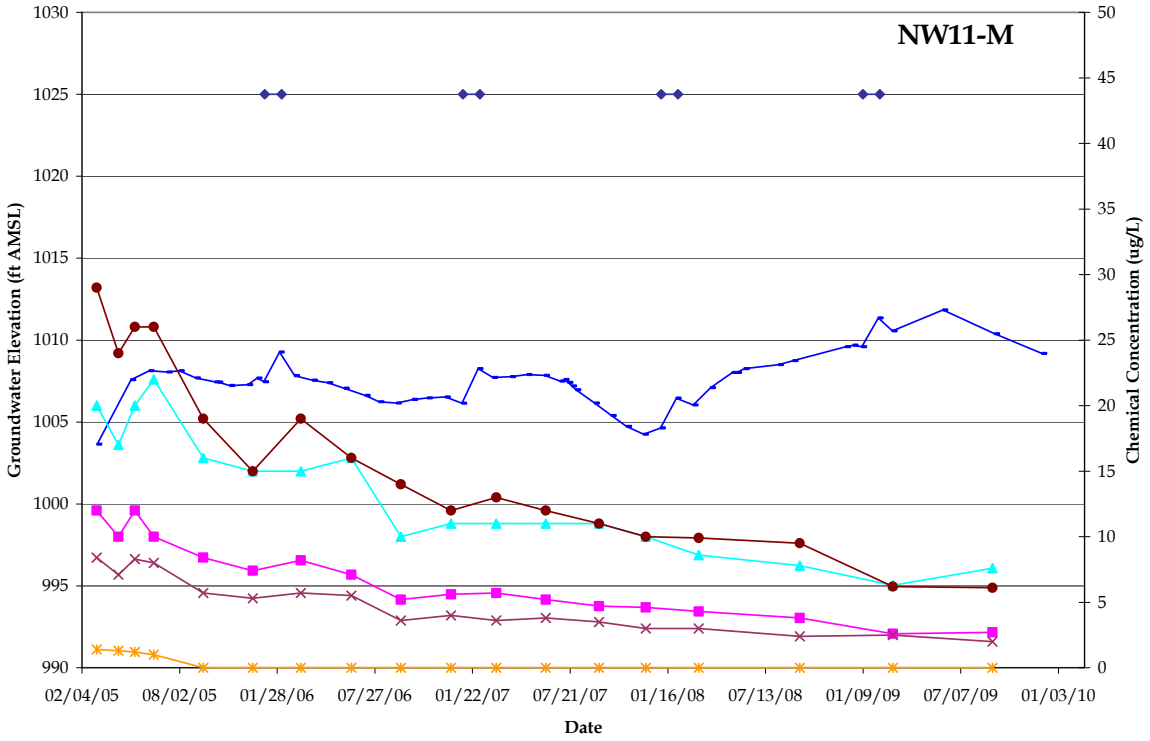


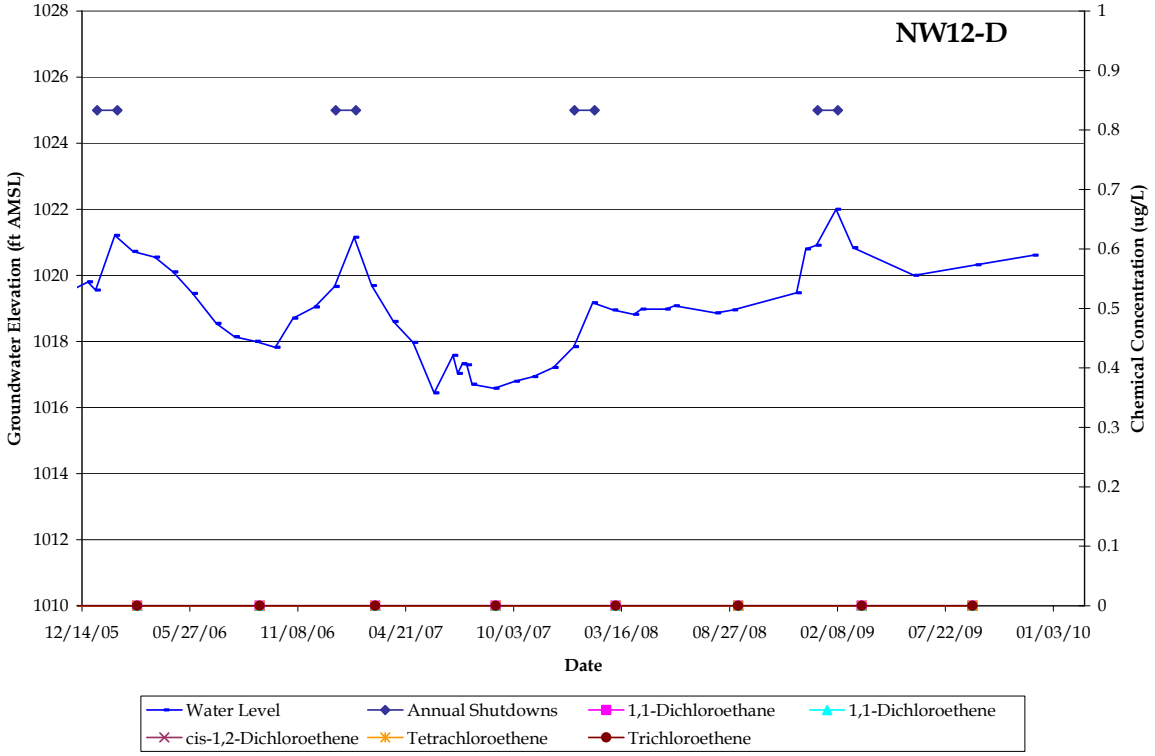
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



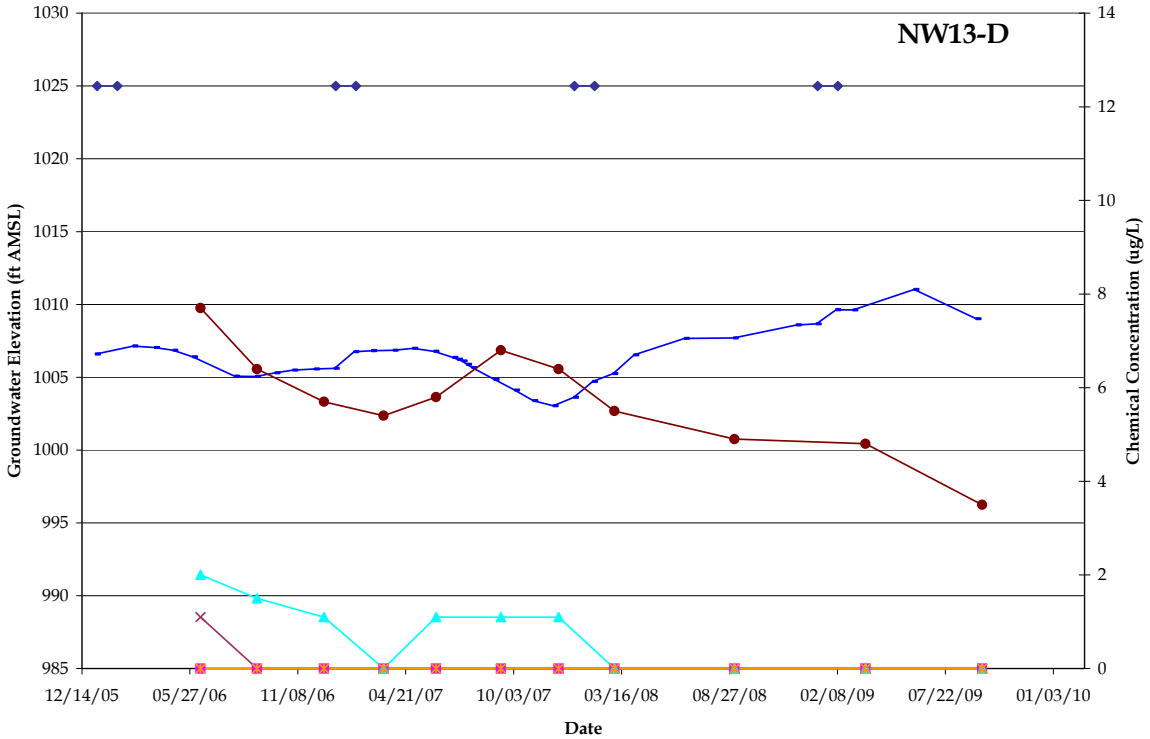


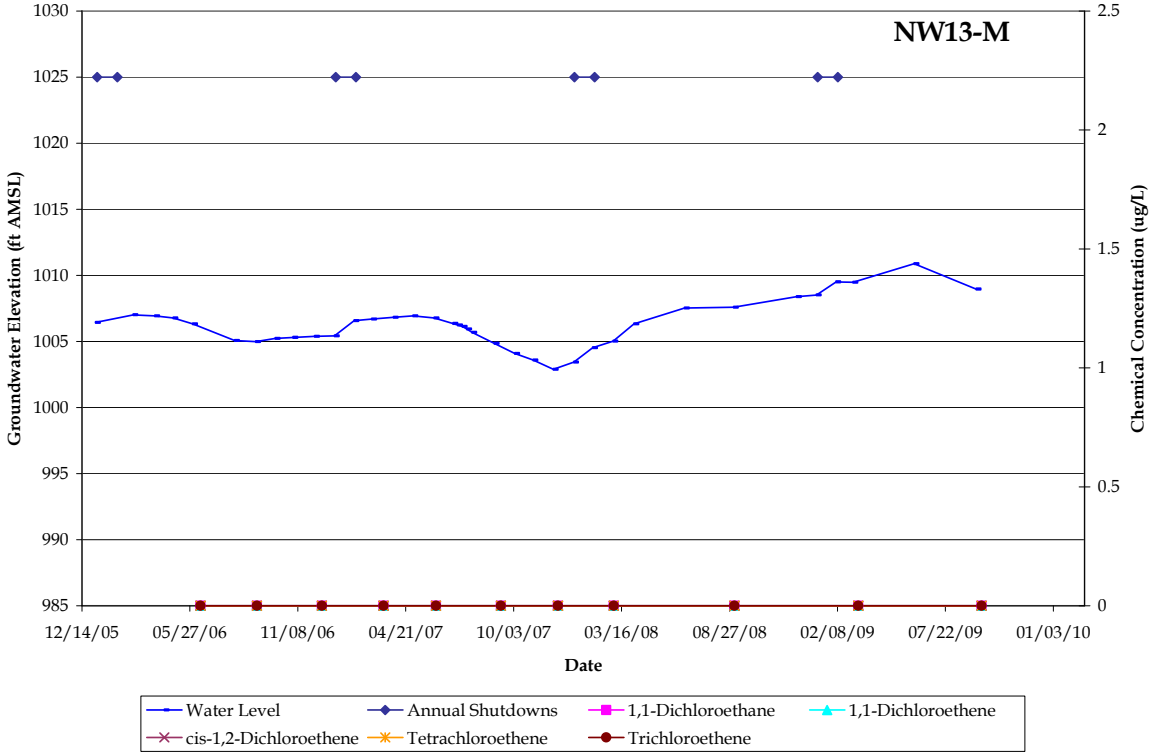
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



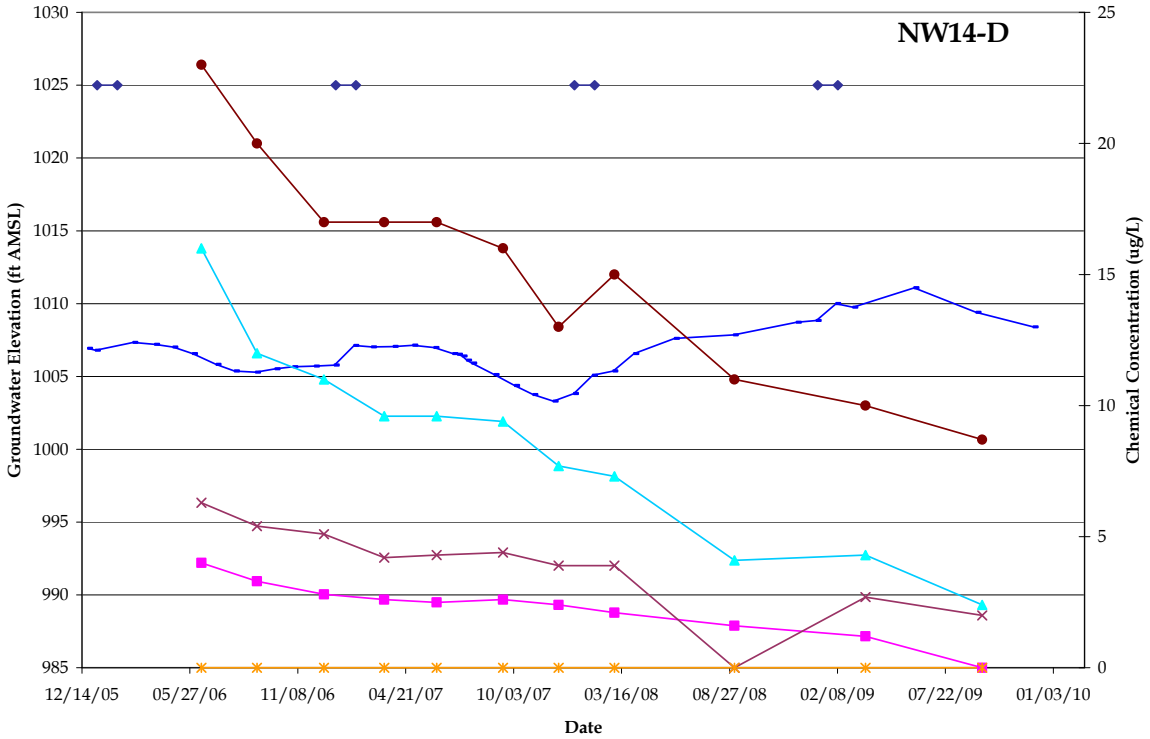


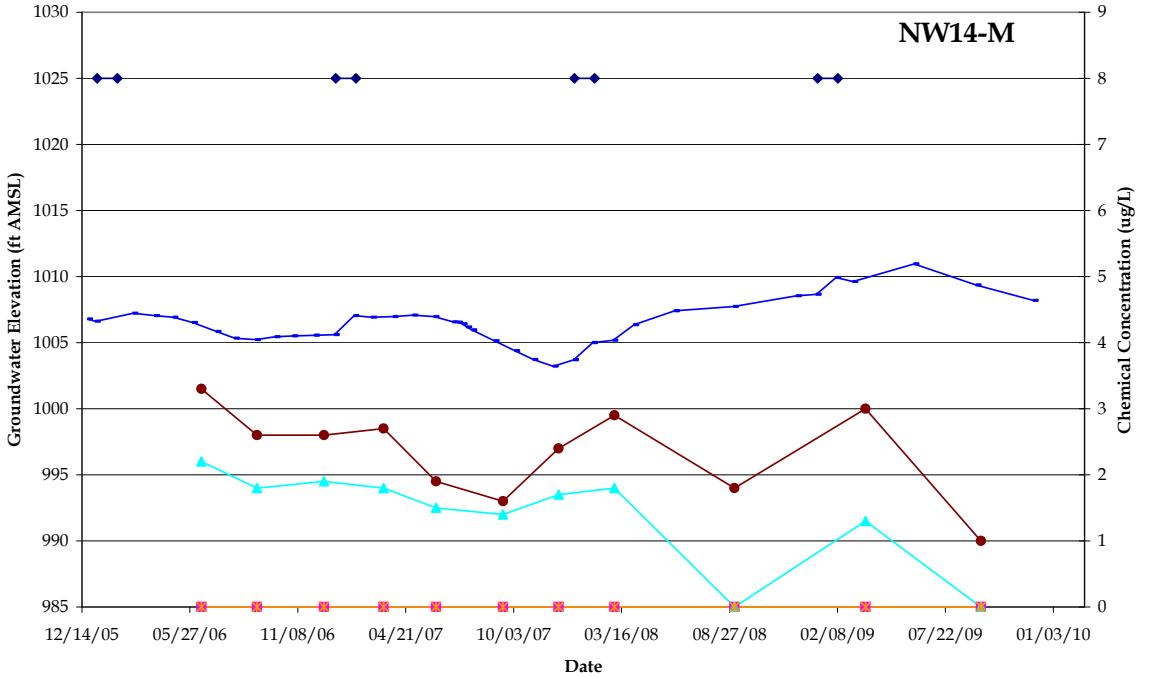
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



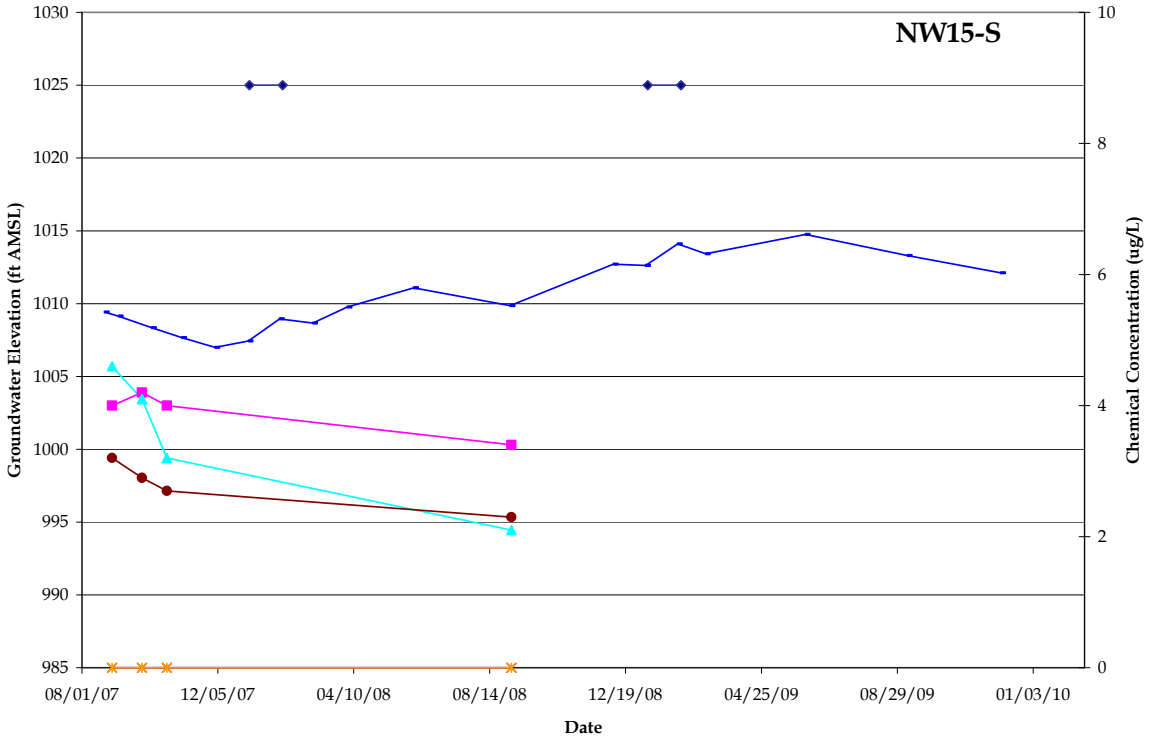


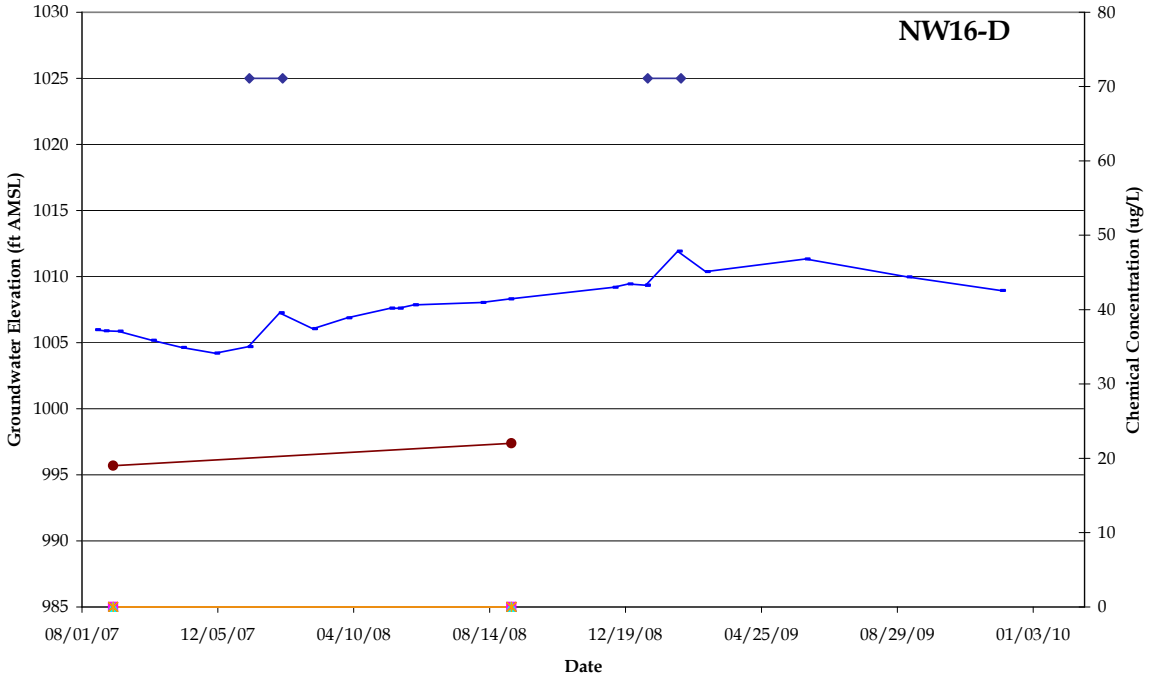
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



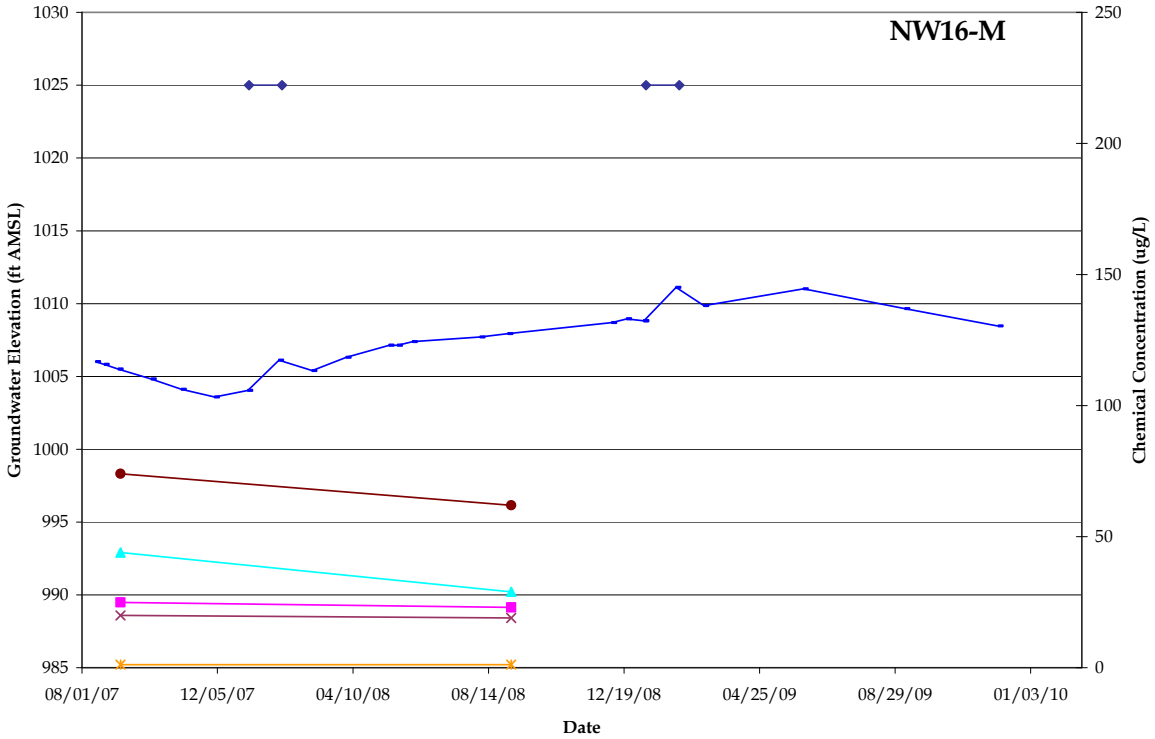


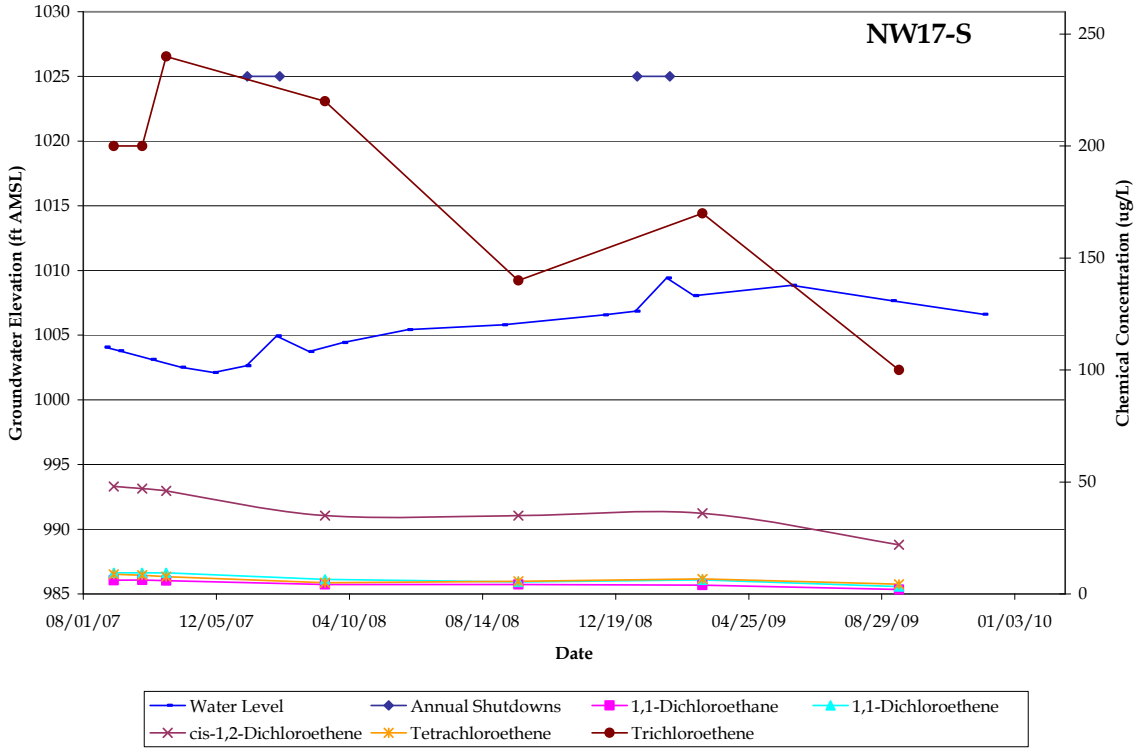
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



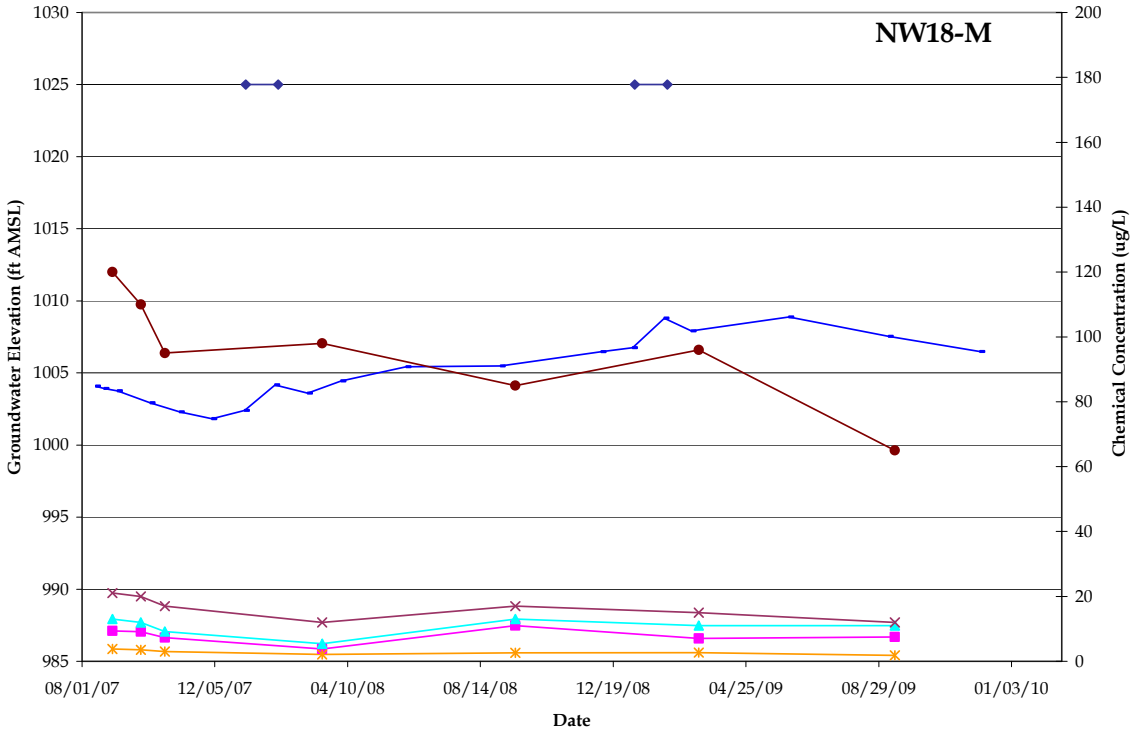


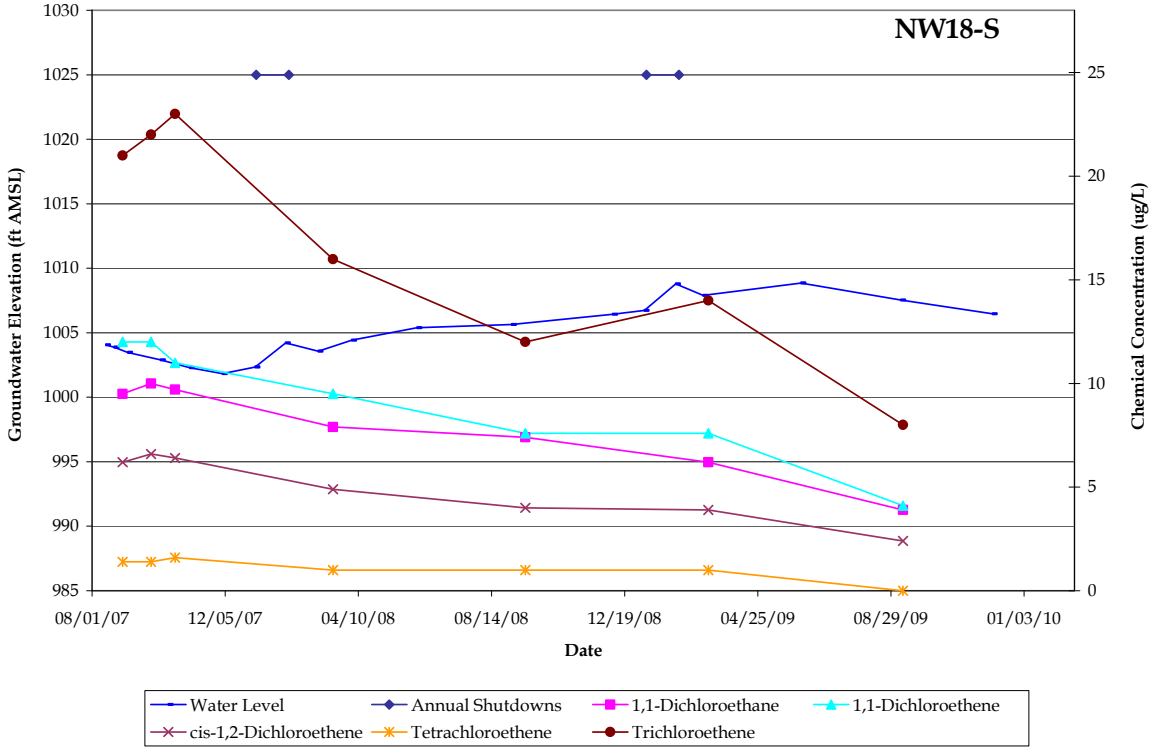
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



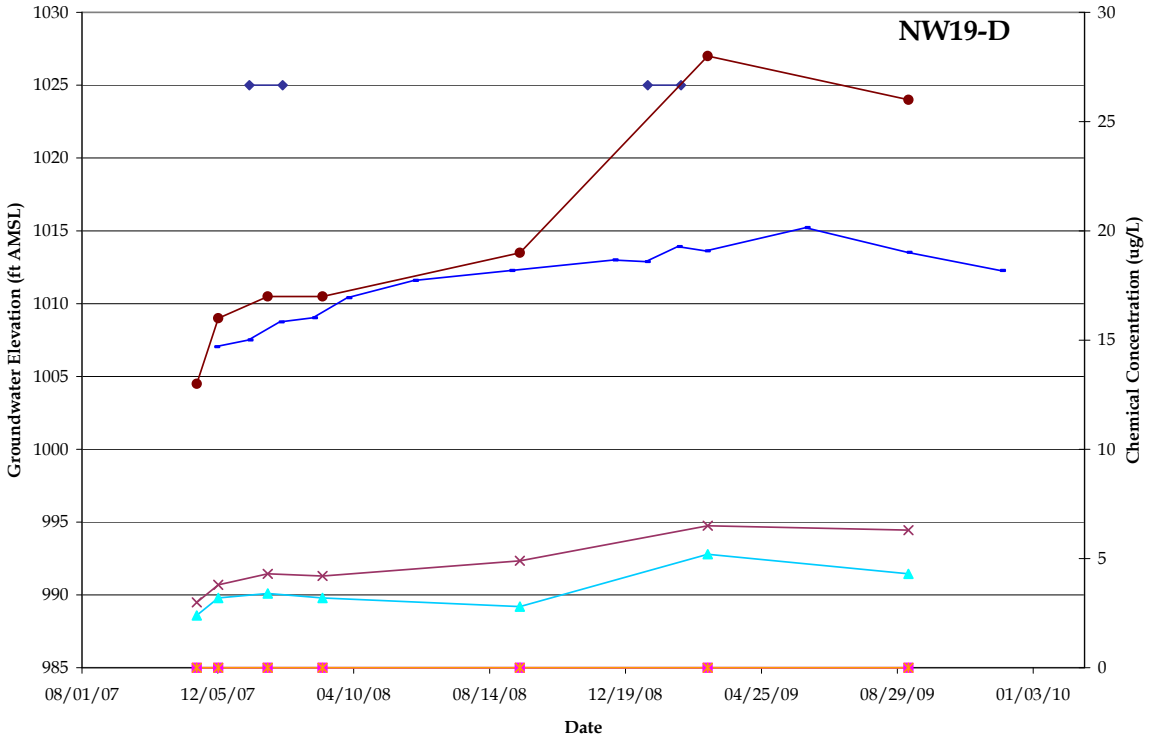


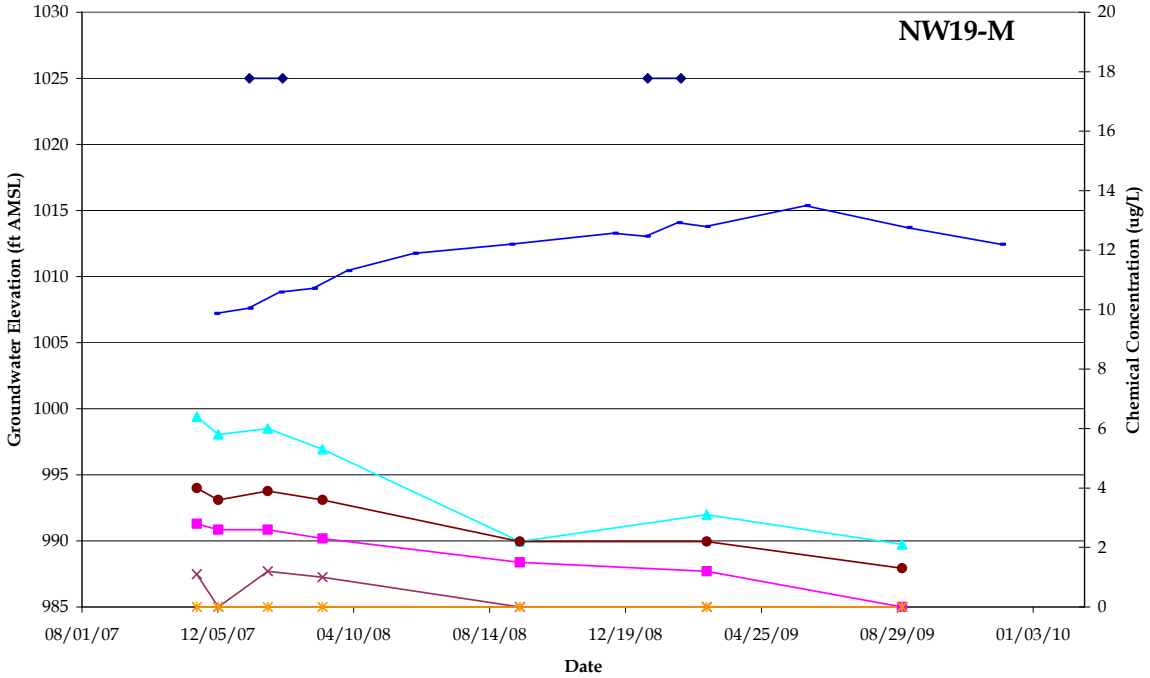
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



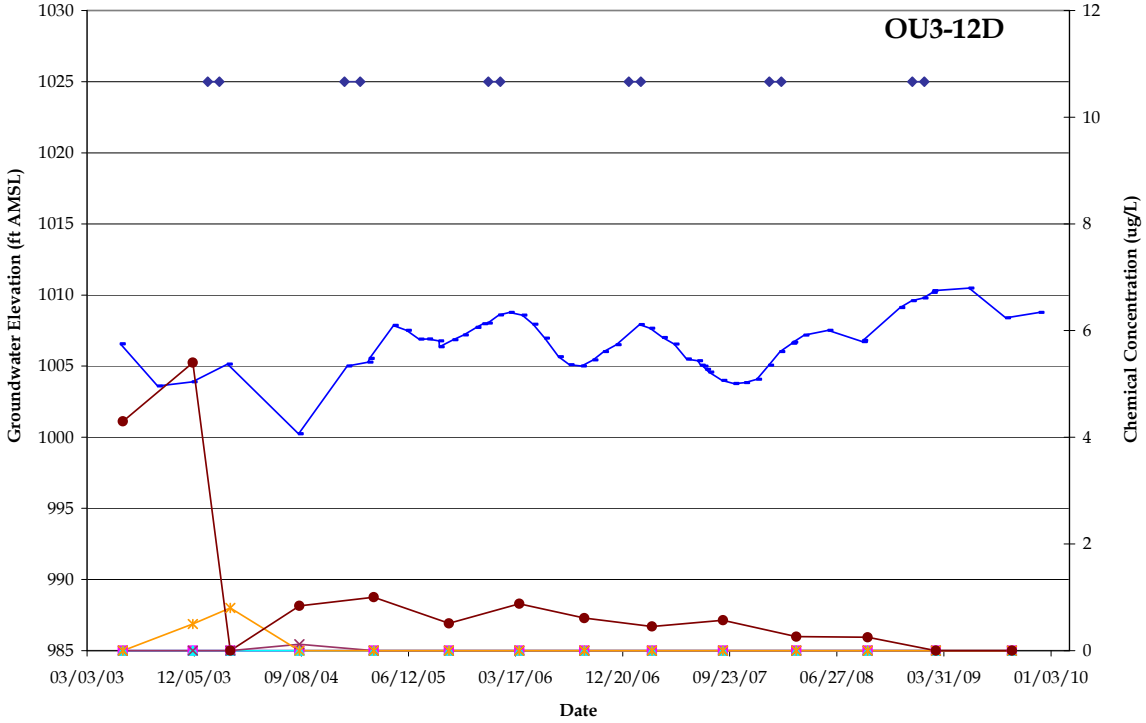


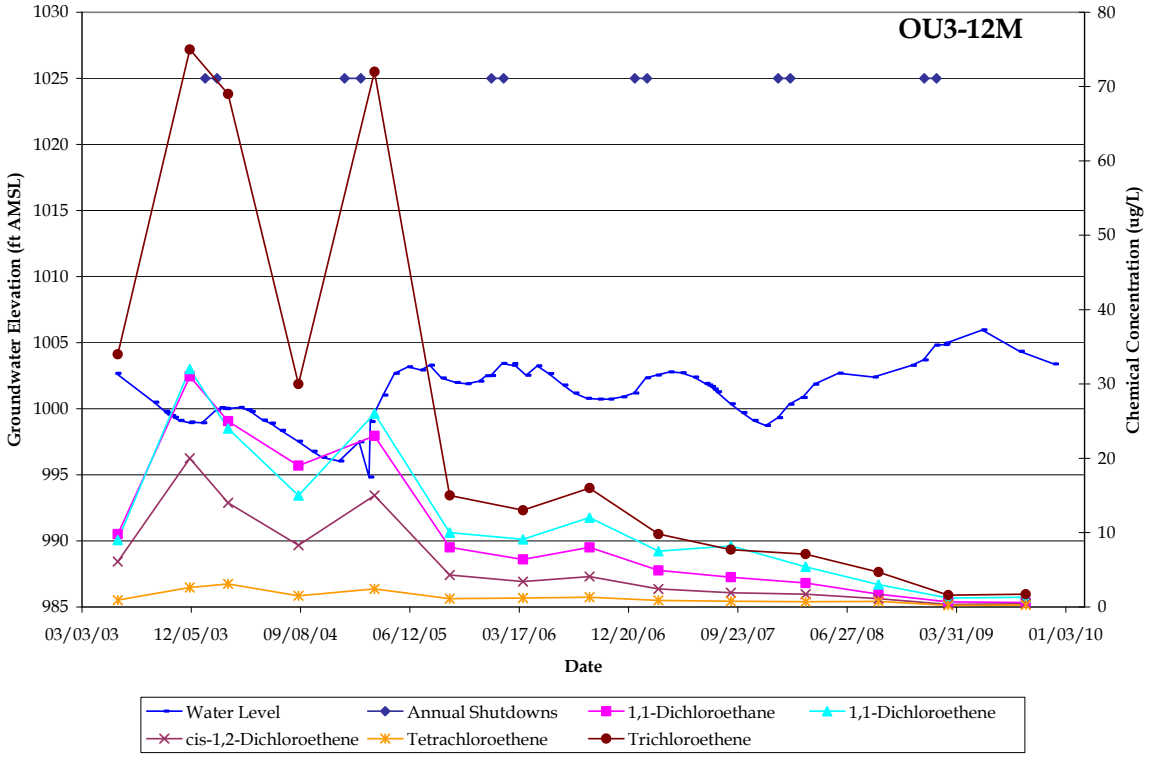
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



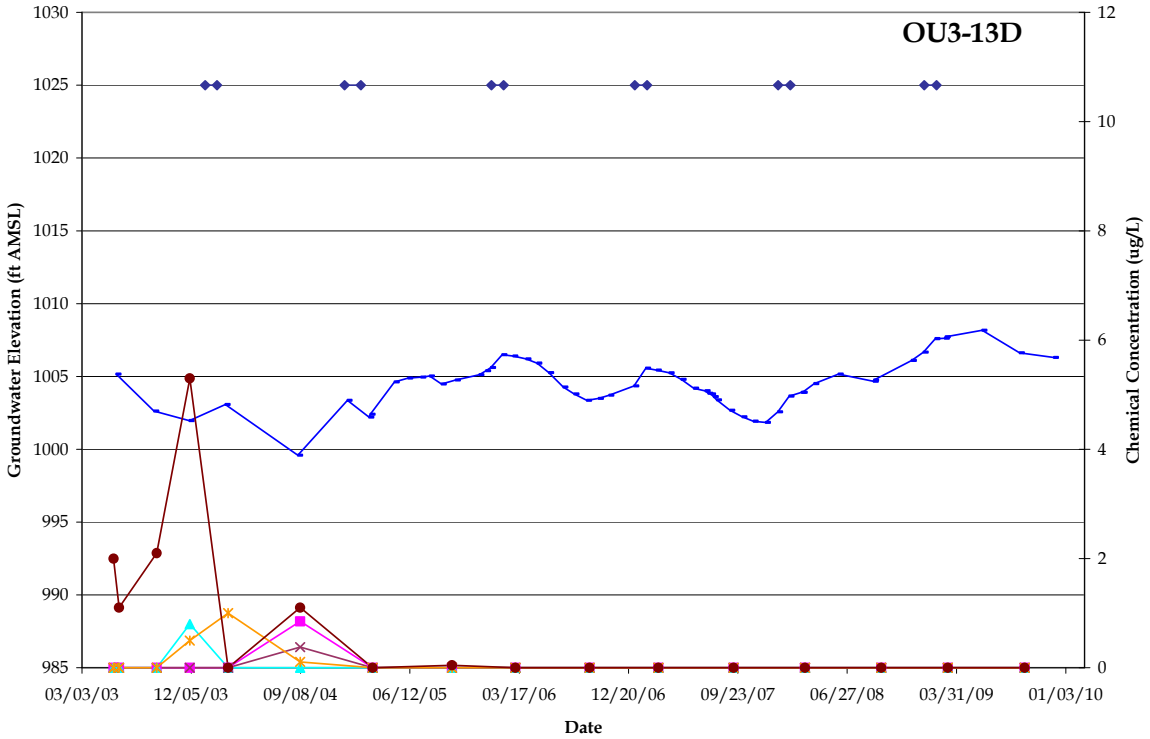


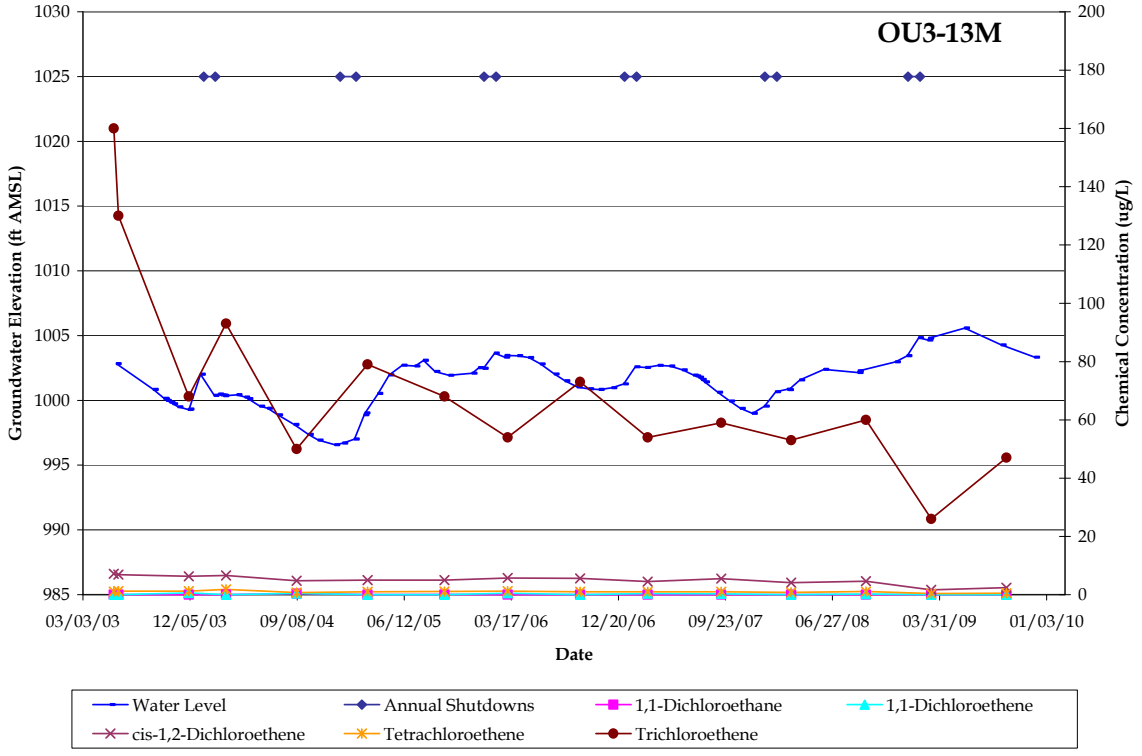
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



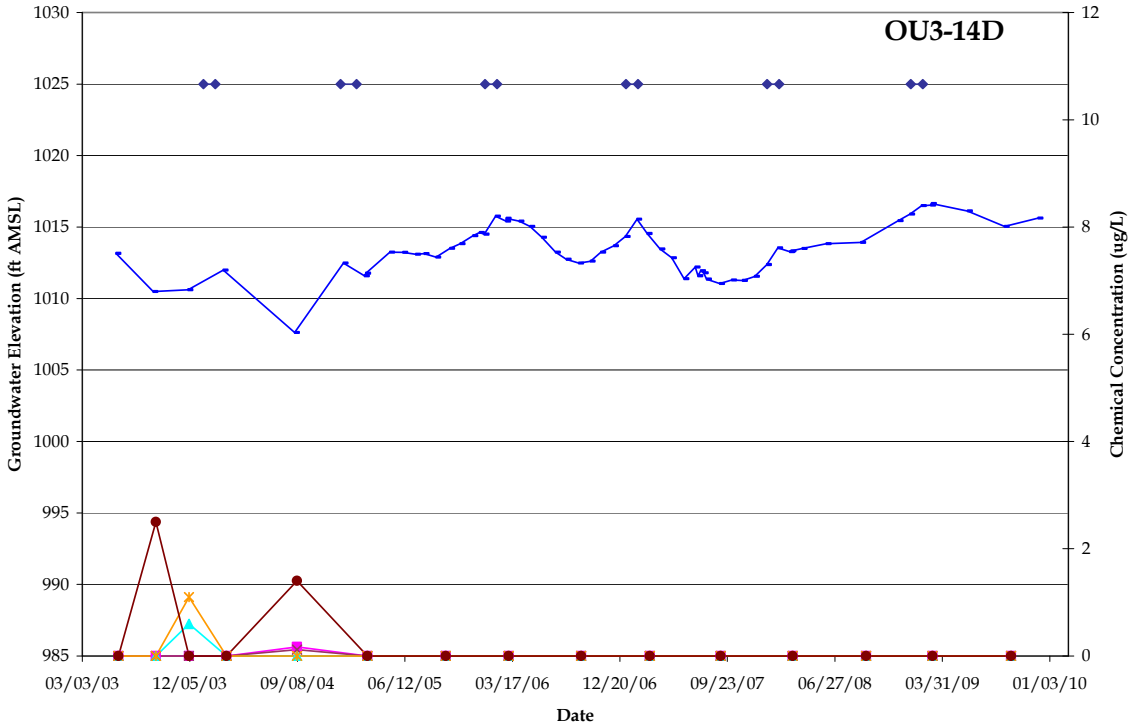


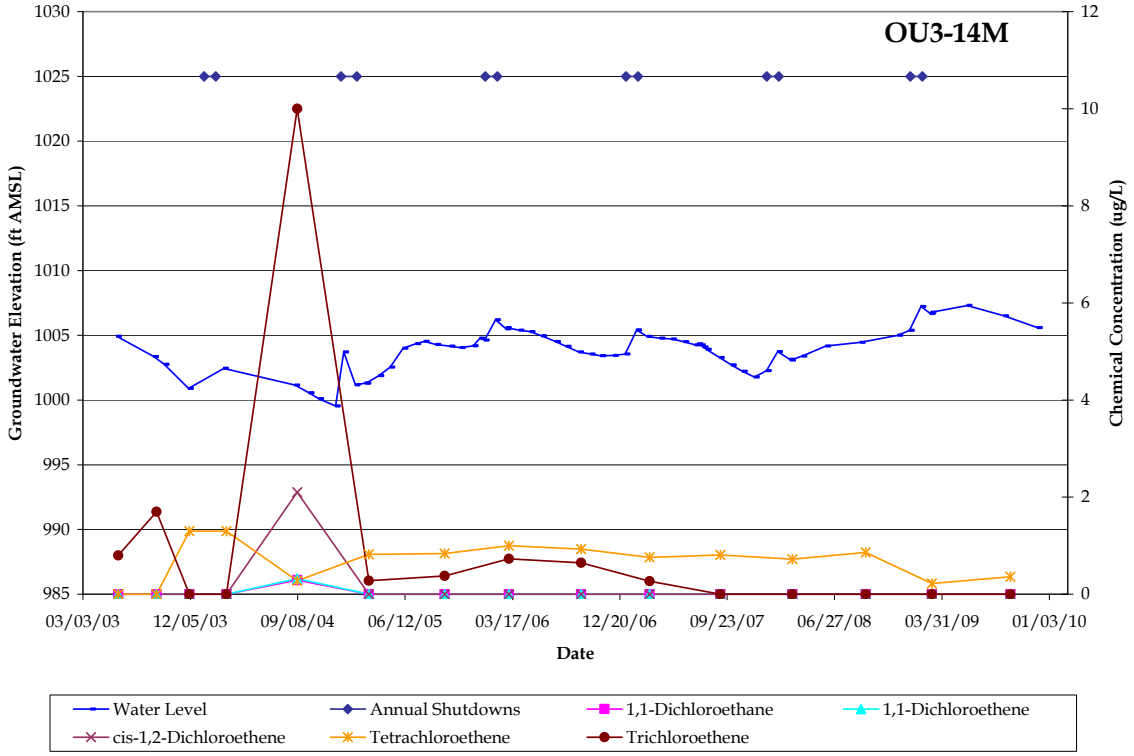
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



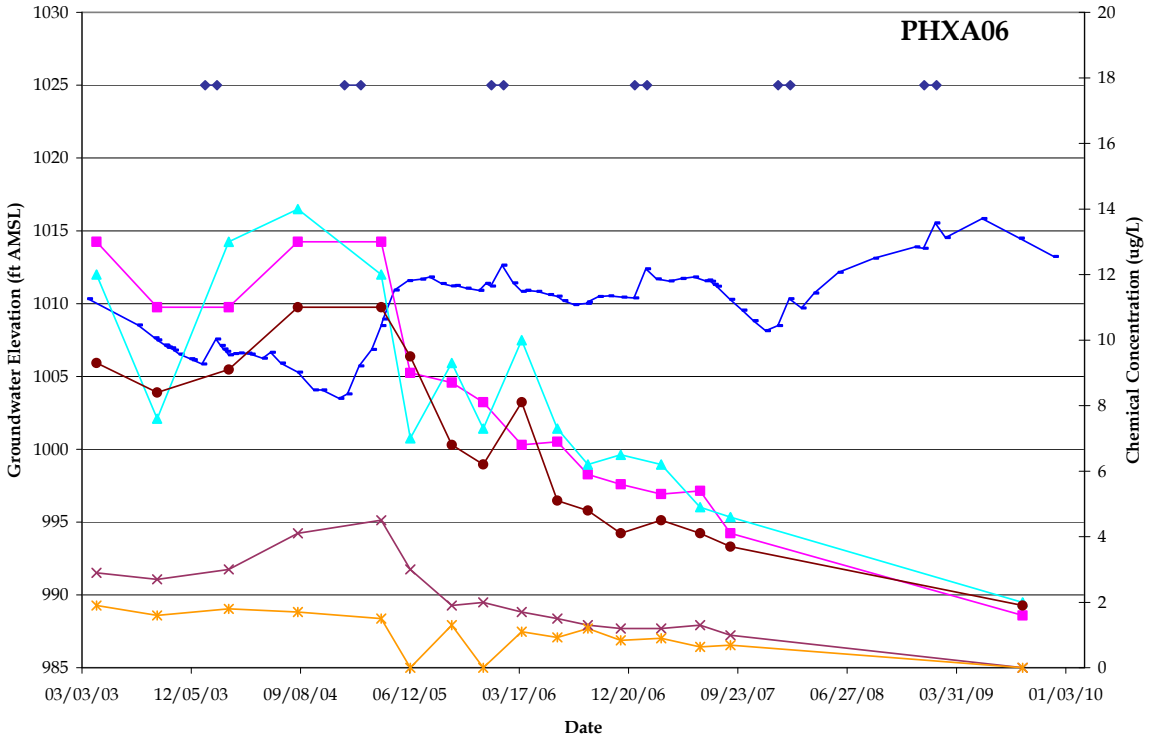


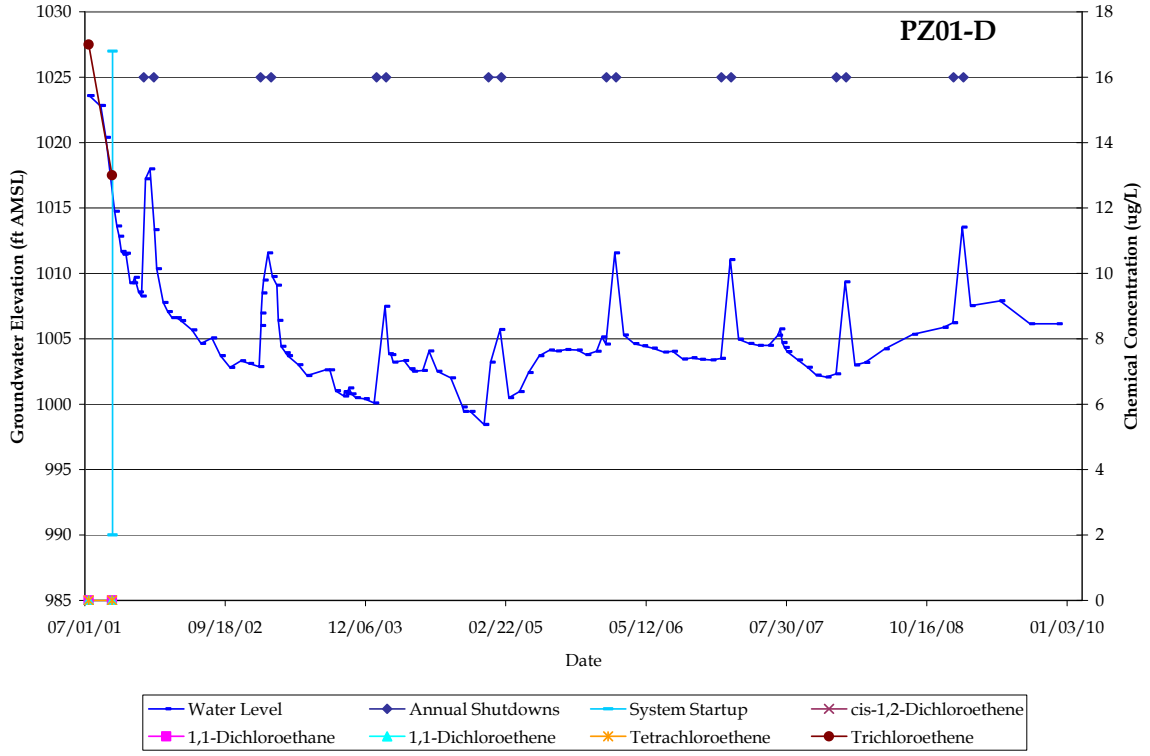
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



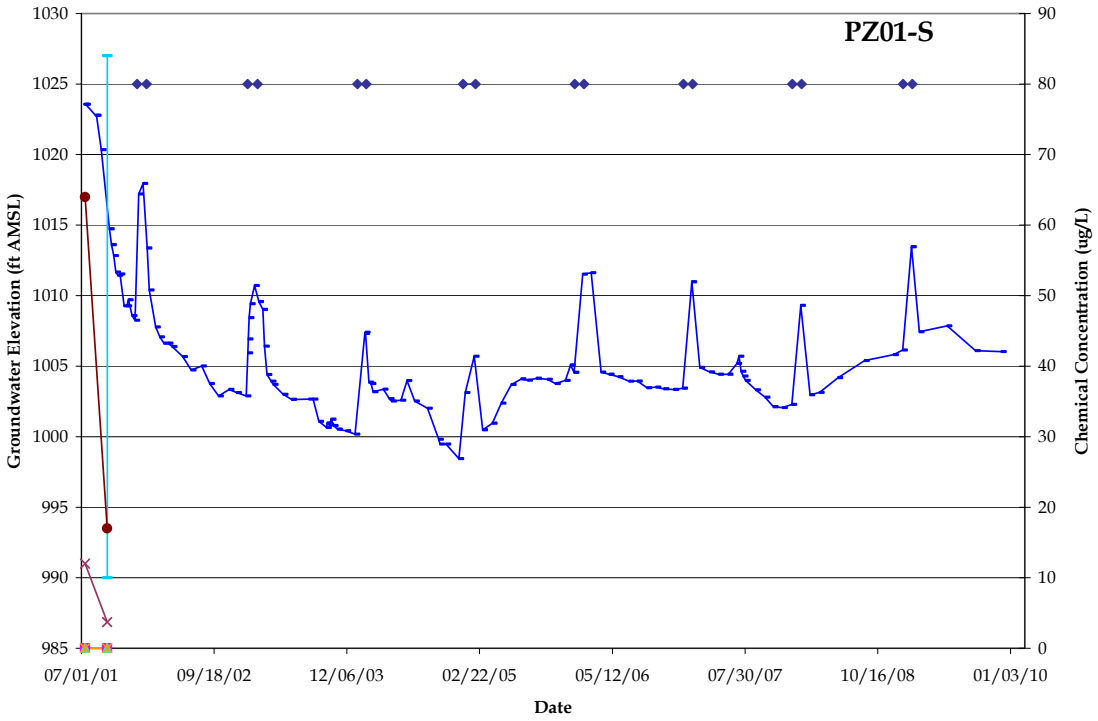


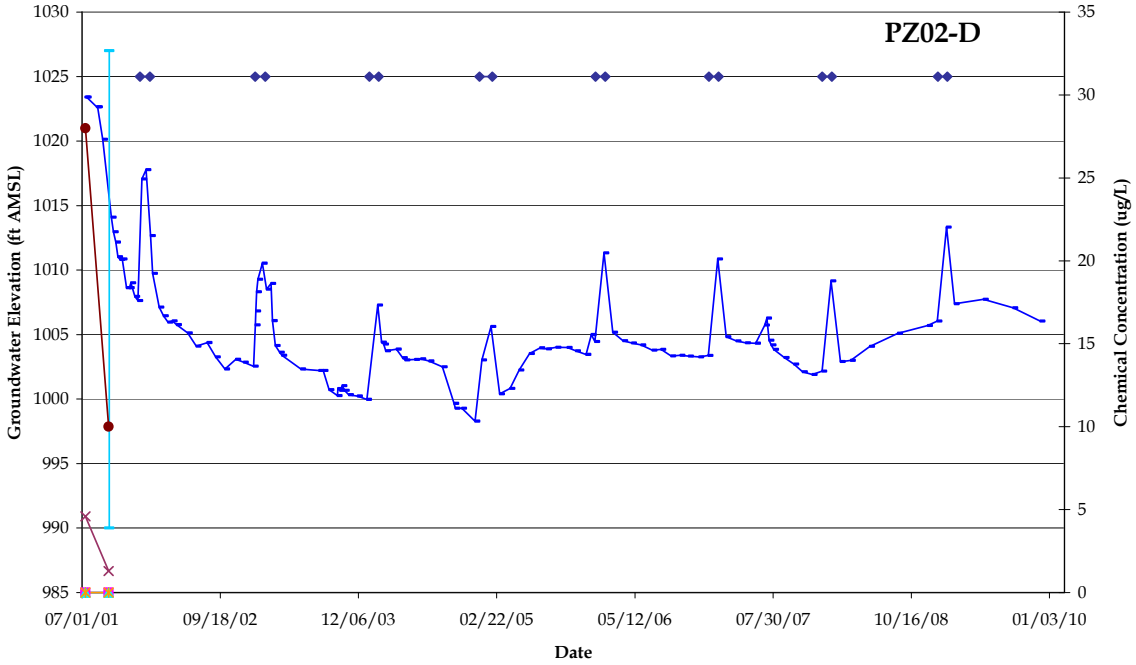
GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



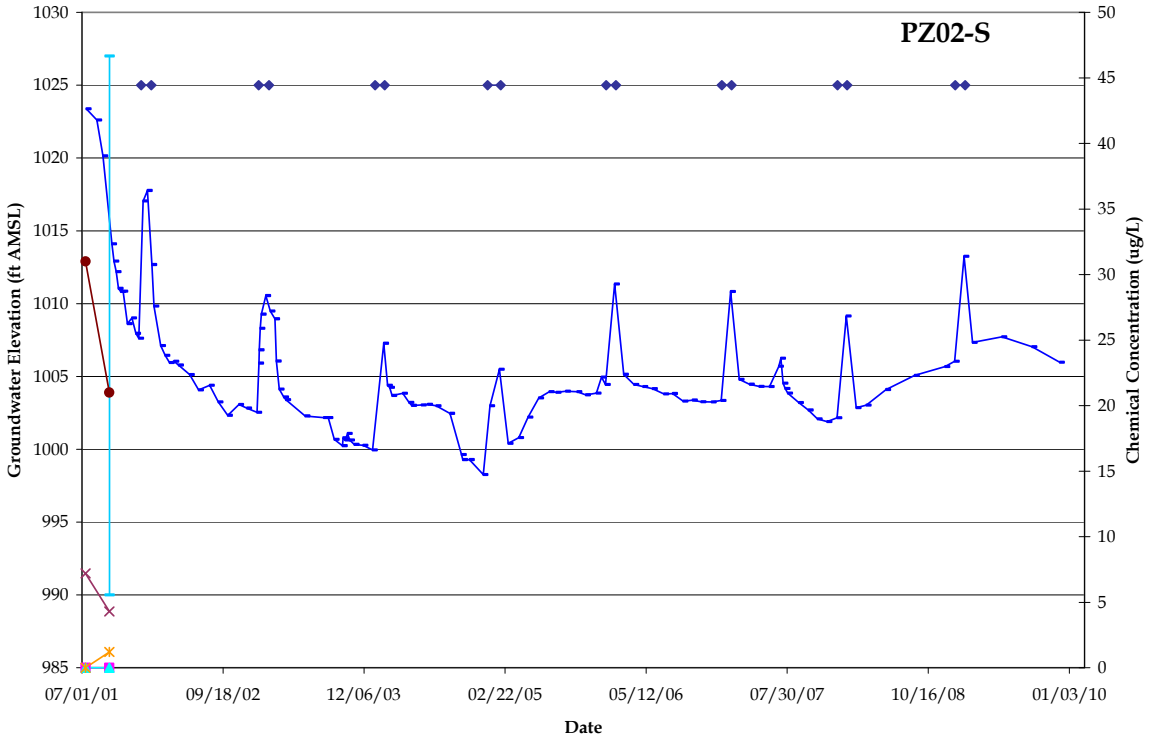


GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA





GROUNDWATER ELEVATION AND SELECT VOC CONCENTRATION TRENDS
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



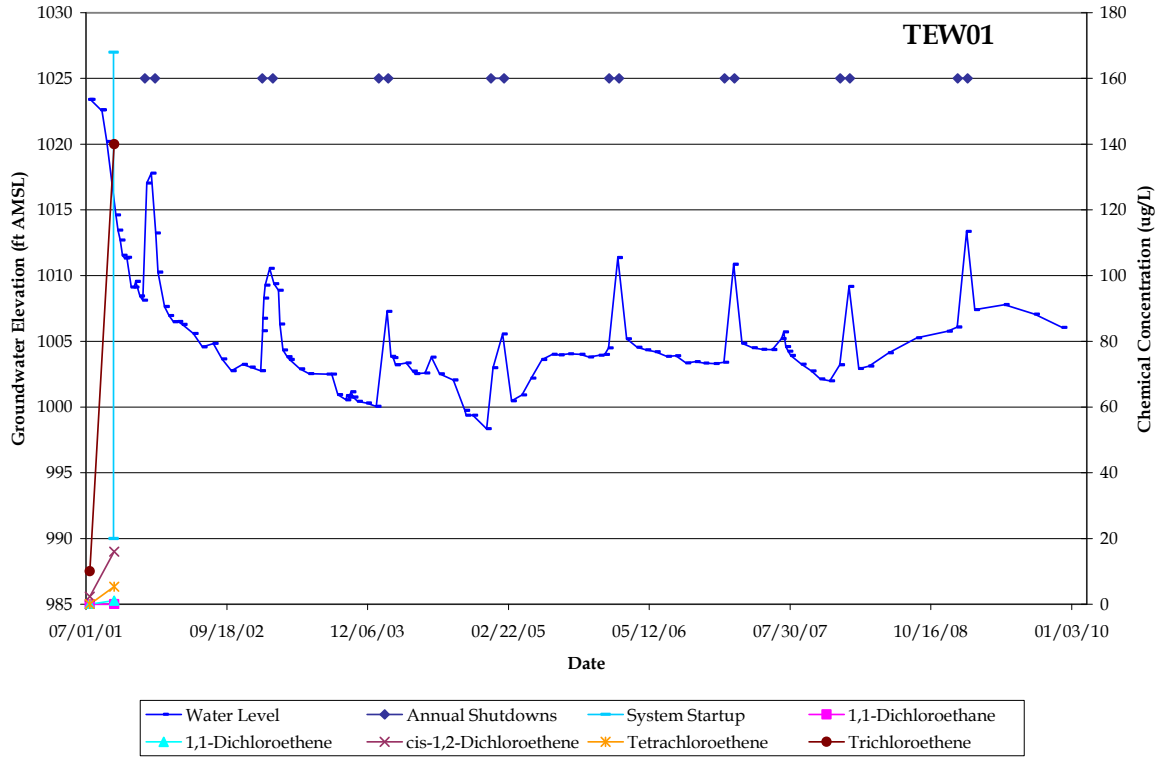


TABLE 4.1

PROCESS SUMMARY - VOLUMES
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

	Volumes (Gallons)						
Date	*EW-N (x 1000)*	*EW-M (x 1000)*	*EW-S (x 1000)*	*Total Influent (EW-N+M+S) (x 1000)*	*UV System (x 1000)*	*Treated Discharge (x 1000)*	*Backwash Wastewater Discharge*
September 2001 - December 2006 Totals	1,751,303	3,420,202	700,879	5,872,384	524,600	5,790,429	5,399,877
January 2007 Totals	3,783	8,222	1,284	13,289	0	13,036	28,820
February 2007 Totals	21,177	44,786	6,870	72,833	0	71,608	27,700
March 2007 Totals	27,003	57,144	8,913	93,060	0	92,216	49,770
April 2007 Totals	26,520	55,357	8,697	90,574	0	90,661	167,120
May 2007 Totals	27,284	57,894	8,980	94,158	0	93,609	67,180
June 2007 Totals	26,365	57,693	8,751	92,809	0	91,340	39,690
July 2007 Totals	16,658	63,232	6,926	86,816	0	85,076	253,070
August 2007 Totals	26,664	60,354	9,019	96,037	0	94,613	61,010
September 2007 Totals	26,416	58,175	8,728	93,319	0	91,529	6,280
October 2007 Totals	25,831	58,112	8,603	92,546	0	90,758	177,360
November 2007 Totals	24,751	55,274	8,272	88,297	11,669	87,268	29,970
December 2007 Totals	15,527	34,702	5,237	55,466	0	54,366	15,820
Total Gallons 2001 to 2007	**2,019,282**	**4,031,147**	**791,159**	**6,841,587**	**536,269**	**6,746,509**	**6,323,667**

Note: A correction was made to total influent volume reported in the November 2007 Progress Report as follows:
The total volume treated in November 2007 was corrected to 88.3 million gallons from the 88.9 million gallons reported in the November 2007 Progress Report. The error was due to a discrepancy in the SCADA data collection process/system.

TABLE 4.1

PROCESS SUMMARY - VOLUMES
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

	Volumes (Gallons)						
Date	*EW-N (x 1000)*	*EW-M (x 1000)*	*EW-S (x 1000)*	*Total Influent (EW-N+M+S) (x 1000)*	*UV System (x 1000)*	*Treated Discharge (x 1000)*	*Backwash Wastewater Discharge*
Sept. 2001 to December 2007 Totals	2,019,282	4,031,147	791,159	6,841,587	536,269	6,746,509	6,323,667
January 2008 Totals	3,063	6,828	1,028	10,919	0	10,713	63,620
February 2008 Totals	22,028	49,309	7,320	78,657	0	78,016	136,830
March 2008 Totals	26,961	59,594	9,042	95,597	0	95,472	60,440
April 2008 Totals	26,123	57,166	8,710	91,999	0	92,274	56,460
May 2008 Totals	26,725	59,173	10,807	96,705	0	96,907	91,910
June 2008 Totals	25,896	58,250	10,466	94,612	0	94,533	26,790
July 2008 Totals	25,826	56,788	10,487	93,101	0	93,811	5,760
August 2008 Totals	25,461	56,649	10,322	92,432	0	92,098	110
September 2008 Totals	26,171	57,791	10,511	94,473	0	93,526	154,610
October 2008 Totals	26,978	58,744	10,834	96,556	0	96,971	25,450
November 2008 Totals	26,176	57,199	10,459	93,834	3,116	93,911	26,100
December 2008 Totals	24,444	54,739	9,801	88,984	0	88,017	113,170
Total Gallons 2001 to 2008	**2,305,133**	**4,663,376**	**900,945**	**7,869,456**	**539,385**	**7,772,757**	**7,084,917**

TABLE 4.1

PROCESS SUMMARY - VOLUMES
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

	Volumes (Gallons)						
Date	*EWN (x 1000)*	*EWM (x 1000)*	*EWS (x 1000)*	*Total Influent (EWN+M+S) (x 1000)*	*UV System (x 1000)*	*Treated Discharge (x 1000)*	*Backwash Wastewater Discharge*
Sept. 2001 to Dec. 2008 Totals	**2,305,133**	**4,663,376**	**900,945**	**7,869,456**	**539,385**	**7,772,757**	**7,084,917**
January 2009 Totals	7,396	16,516	2,951	26,863	0	26,760	810
February 2009 Totals	17,170	37,931	6,883	61,984	0	61,501	10,358
March 2009 Totals	27,088	59,555	10,908	97,551	0	97,283	26,090
April 2009 Totals	25,983	57,810	10,520	94,313	0	93,599	9,890
May 2009 Totals	26,150	60,219	10,822	97,191	0	96,388	115,500
June 2009 Totals	25,414	58,469	10,436	94,319	0	93,155	30,440
July 2009 Totals	26,109	60,396	10,850	97,355	0	96,747	170
August 2009 Totals	26,588	60,394	10,764	97,746	0	96,604	37,940
September 2009 Totals	25,903	56,688	10,325	92,916	0	92,904	93,150
October 2009 Totals	27,237	59,605	10,599	97,441	0	96,111	60
November 2009 Totals	26,492	57,373	10,234	94,099	0	93,323	7,800
December 2009 Totals	26,852	59,337	10,442	96,631	3,327	95,223	116,730
Total Gallons 2001 to 2009	**2,593,514**	**5,307,669**	**1,016,679**	**8,917,865**	**542,712**	**8,812,355**	**7,533,855**

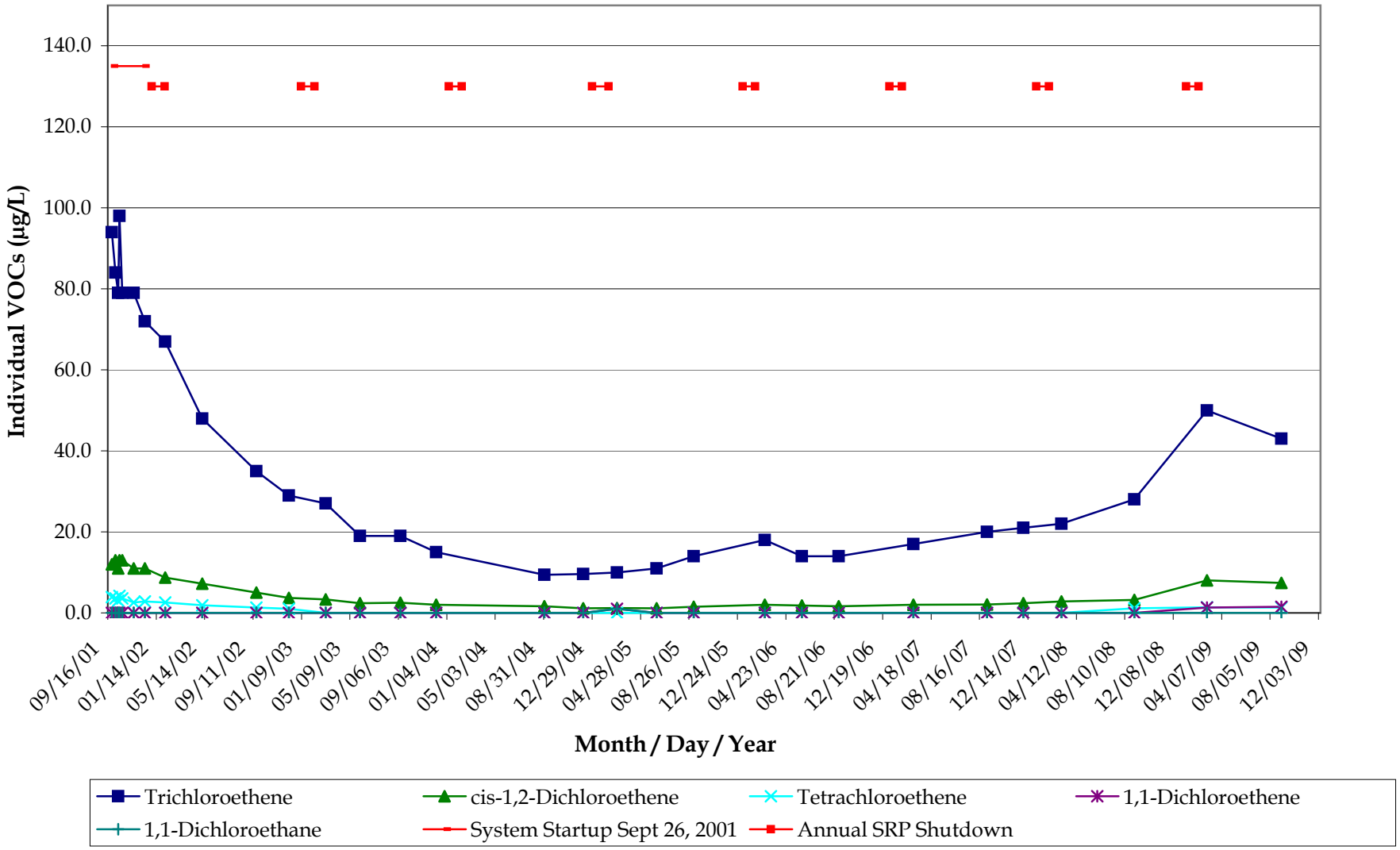
TABLE 4.9

SUMMARY OF COMBINED INFLUENT ANALYTICAL RESULTS
METALS AND GENERAL CHEMISTRY
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

		Sample Location	*Combined Influent*	
	Treated Groundwater Discharge Standards	*Frequency*	*Annually*	*Annually*
		Date	*9/4/2007*	*10/4/2007*
		Number	*PS-90407-02*	*PS-100507-01*
		Status	*Final*	*Final*
Total Recoverable Metals (mg/L)				
Copper	NNS		ND(0.010)	NA
Potassium	NNS		8.3	NA
Sodium	NNS		430	NA
Vanadium	NNS		ND(0.010)	NA
Dissolved Metals (mg/L)				
Arsenic, Dissolved	0.01		0.008	NA
Barium, Dissolved	2		0.049	NA
Calcium, Dissolved	NNS		94	NA
Chromium, Dissolved	0.1		0.0075	NA
Iron, Dissolved	NNS		ND(0.050)	NA
Magnesium, Dissolved	NNS		35	NA
General Chemistry (mg/L)				
Alkalinity as $CaCO_3$	NNS		ND(2.0)	NA
Ammonia-N	NNS		ND(0.5)	NA
Bicarbonate Alkalinity as $CaCO_3$	NNS		300	NA
Fluoride	NNS		0.48	NA
Nitrate-N	10		7.1	NA
Nitrite-N	1		ND(0.2)	NA
Orthophophorus	NNS		ND(0.2)	NA
Total Dissolved Solids	NNS		1300	NA
Total Suspended Solids	NNS		ND(10.0)	NA
Hardness, Dissolved ($CaCO_3$)	NNS		380	NA
Sulfate	NNS		240	NA
Chloride	NNS		330	NA
Dissolved Organic Carbon*	NNS		NA	ND(1.0)
Oil & Grease	NNS		ND(5.0)	NA
Phosphorus	NNS		ND(0.1)	NA
Total Organic Carbon	NNS		ND(1.0)	NA
Total Kjeldahl Nitrogen	NNS		ND(1.3)	NA
Field Parameters				
pH	s.u.		7.4	-
Conductivity	$\mu S/cm^3$		2047	-
Temperature	^oF		77.7	-
System Status:				
EW-N			X	X
EW-M			X	X
EW-S			X	X
Ultra -violet oxidation system with H2O2				
Ultra-violet oxidation system without H2O2				

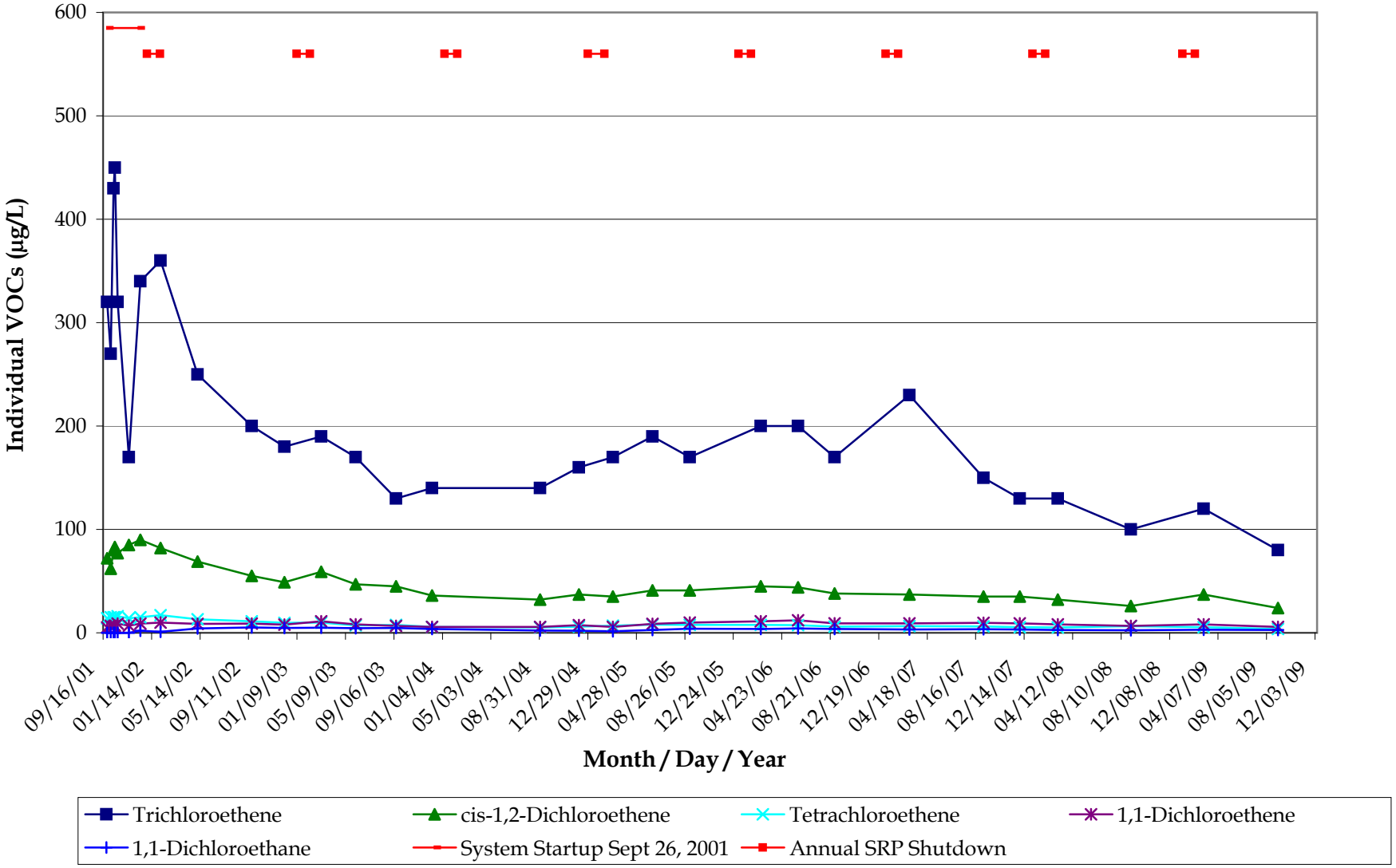
Notes:
mg/L = micrograms per liter
ND(x.x) - Not detected above the reported sample quantitation limit x.x
NNS = No numeric standard
s.u. = standard units
$\mu S/cm^3$ = microsiemens per centimeters cubed
^oF = degrees Fahrenheit

VOC TRENDING EW-N
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



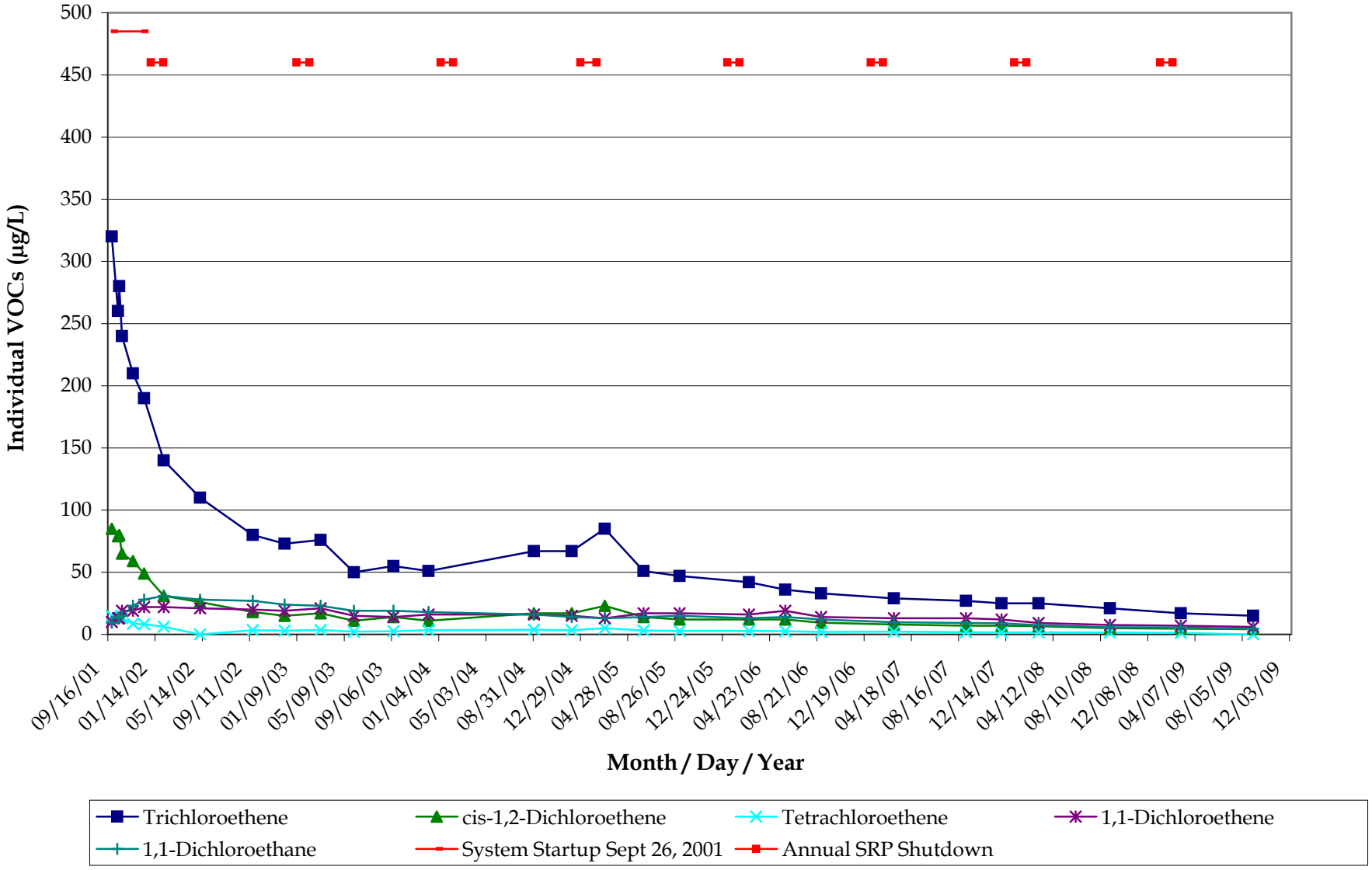
Note:
ug/L - micrograms per liter

VOC TRENDING EW-M
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



Note:
ug/L - micrograms per liter

VOC TRENDING EW-S
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA



Note:
ug/L - micrograms per liter

TABLE 4.7

SUMMARY OF ANALYTICAL RESULTS OF FACILITY DISCHARGE
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

	Treated Groundwater Discharge Standards	*Frequency*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*
		Date	*1/4/2007*	*1/4/2007*	*2/12/2007*	*2/12/2007*	*3/5/2007*	*3/5/2007*	*4/9/2007*	*4/9/2007*	*5/1/2007*	*5/1/2007*	*6/5/2007*	*6/5/2007*
		Number	*PS-010407-07*	*PS-010407-08*	*PS-021207-07*	*PS-021207-08*	*PS-030507-08*	*PS-030507-09*	*PS-040907-07*	*PS-040907-08*	*PS-050107-07*	*PS-050107-08*	*PS-060507-09*	*PS-060507-10*
		Status	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*
Volatile Organic Compounds (VOCs) (µg/L)														
Benzene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	TTHM		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromomethane	TTHM		ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)UJ	ND(2.0)	ND(2.0)
Chloroform	TTHM		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane	NNS		ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)UJ	ND(2.0)	ND(2.0)
1,1-Dichloroethane	NNS		ND(1.0)	ND(1.0)	1.2	1.1	2.4	2.1	1.0	1.1	ND(1.0)	ND(1.0)	2.9	2.9
1,2-Dichloroethane	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	7		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	70		1.0	1.1	1.6	1.4	2.8	2.6	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	3.8	3.5
trans-1,2-Dichloroethene	100		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Tetrachloroethene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	1,000		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,1-Trichloroethane	200		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichlorofluoromethane	TTHM		ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Vinyl Chloride	2		ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Xylene	10,000		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
	Total Discharge VOCs		1.0	1.1	2.8	2.5	5.2	4.7	1.0	1.1	0	0	6.7	6.4
Field Parameters														
pH	s.u.		7.22	7.22	7.24	7.24	7.24	7.24	7.28	7.28	6.84	6.85	7.58	7.6
Conductivity	$\mu S/cm^3$		1501	1501	1501	1501	1087	1087	2001	2001	1152	1153	2013	2010
Temperature	^oF		74.1	74.1	75.3	75.3	78.0	78.0	78.5	78.5	77.8	77.9	80.4	80.6
System Status (X indicates operational):														
EW-N			X	X	X	X	X	X	X	X	X	X	X	X
EW-M			X	X	X	X	X	X	X	X	X	X	X	X
EW-S			X	X	X	X	X	X	X	X	X	X	X	X
Ultra-violet oxidation system with H2O2														
Ultra-violet oxidation system without H2O2														

Notes:
µg/L = micrograms per liter
ND(x.x) - Not detected above the reported sample quantitation limit x.x
TTHM = Total Trihalomethanes = 100 µg/L
NNS = No numeric standard
J = Estimated Value
s.u. = standard units
$\mu S/cm^3$ = microsiemens per centimeters cubed
^oF = degrees Fahrenheit

TABLE 4.7

SUMMARY OF ANALYTICAL RESULTS OF FACILITY DISCHARGE
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

	Treated Groundwater Discharge Standards	*Frequency*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*	*Monthly*	*Monthly (duplicate)*
		Date	*1/3/2008*	*1/3/2008*	*2/8/2008*	*2/8/2008*	*3/6/2008*	*3/6/2008*	*4/2/2008*	*4/2/2008*	*5/1/2008*	*5/1/2008*	*6/3/2008*	*6/3/2008*
		Number	*PS-010308-07*	*PS-010308-08*	*PS-020808-07*	*PS-020808-08*	*PS-030608-08*	*PS-030608-09*	*PS-040208-07*	*PS-040208-08*	*PS-050108-07*	*PS-050108-08*	*PS-060308-07*	*PS-060308-08*
		Status	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*
Volatile Organic Compounds (VOCs) (µg/L)														
Benzene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	TTHM		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromomethane	TTHM		ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chloroform	TTHM		ND(1.0)	1.1	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.6	1.5	ND(1.0)	ND(1.0)
Chloromethane	NNS		ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1-Dichloroethane	NNS		3	3.3	1.6	1.6	ND(1.0)	ND(1.0)	1.4	1.5	4.4	4.2	ND(1.0)	ND(1.0)
1,2-Dichloroethane	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	7		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	70		4.6	4.7	1.9	1.8	ND(1.0)	ND(1.0)	1.6	1.7	6.1	5.8	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	100		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Tetrachloroethene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	1,000		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,1-Trichloroethane	200		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichlorofluoromethane	TTHM		ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Vinyl Chloride	2		ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Xylene	10,000		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
	Total Discharge VOCs		7.6	9.1	3.5	3.4	0	0	3	3.2	12.1	11.5	0	0
Field Parameters														
pH	s.u.		7.09	7.09	7.03	7.03	7.17	7.17	7.35	7.35	7.12	7.12	6.9	6.9
Conductivity	$\mu S/cm^3$		2053	2053	1961	1961	1724	1724	2121	2121	2105	2105	1887	1887
Temperature	°F		76.6	76.6	74.9	74.9	77.8	77.8	75.0	75.0	78.0	78.0	78.2	78.2
System Status (X indicates operational):														
EW-N			X	X	X	X	X	X	X	X	X	X	X	X
EW-M			X	X	X	X	X	X	X	X	X	X	X	X
EW-S			X	X	X	X	X	X	X	X	X	X	X	X
Ultraviolet oxidation system with H2O2														
Ultraviolet oxidation system without H2O2														

Notes:
µg/L = micrograms per liter
ND(x.x) - Not detected above the reported sample quantitation limit x.x
TTHM = Total Trihalomethanes = 100 µg/L
NNS = No numeric standard
UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
s.u. = standard units
$\mu S/cm^3$ = microsiemens per centimeters cubed
°F = degrees Fahrenheit

TABLE 4.8

SUMMARY OF ANALYTICAL RESULTS
GRAND CANAL DISCHARGE
52ND STREET SUPERFUND SITE, OU2 AREA
PHOENIX, ARIZONA

		Sample Location	*SRP Discharge*											
	Treated Groundwater Discharge Standards	*Frequency*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*	*Monthly*
		Date	*1/6/2009*	*2/10/2009*	*3/2/2009*	*4/2/2009*	*5/1/2009*	*6/1/2009*	*7/1/2009*	*8/3/2009*	*9/2/2009*	*10/2/2009*	*11/3/2009*	*12/1/2009*
		Number	*PS-010609-11*	*PS-021009-11*	*PS-030209-13*	*PS-040209-11*	*PS-050109-11*	*PS-060109-11*	*PS-070109-11*	*PS-080309-11*	*PS-090209-13*	*PS-100209-11*	*PS-110309-11*	*PS-120109-11*
		Status	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*	*Final*
Volatile Organic Compounds (VOCs) (µg/L)														
Benzene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	TTHM		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromomethane	TTHM		ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)
Chloroform	TTHM		ND(1.0)	ND(1.0)	ND(1.0)	1.0	2.2	ND(1.0)	ND(1.0)	1.1	1.2	ND(1.0)	ND(1.0)	1.2
Chloromethane	NNS		ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)
1,1-Dichloroethane	NNS		ND(1.0)	ND(1.0)	ND(1.0)	2.5	3.9	ND(1.0)	ND(1.0)	2.5	2.4	ND(1.0)	ND(1.0)	2.6
1,2-Dichloroethane	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	7		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.3	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	70		ND(1.0)	ND(1.0)	ND(1.0)	3.5	13	ND(1.0)	1.1	5.6	5.7	ND(1.0)	ND(1.0)	2.3
trans-1,2-Dichloroethene	100		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Tetrachloroethene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	1,000		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,1-Trichloroethane	200		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	5		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichlorofluoromethane	TTHM		ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Vinyl Chloride	2		ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.5)	ND(0.5)	ND(0.50)
Xylene	10,000		ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Field Parameters														
pH	s.u.		7.0	7.1	6.88	6.64	7.07	7.16	7.15	6.38	7.38	7.20	6.98	7.11
Conductivity	$\mu S/cm^3$		1999	2088	1996	1744	1637	1810	1664	1985	2007	1944	1938	1966
Temperature	^oF		73.6	73.9	76.7	74.9	77.3	78.5	78.6	80.8	79.7	77.3	77.3	75.4
System Status (X indicates operational)														
EWN			X	X	X	X	X	X	X	X	X	X	X	X
EWM			X	X	X	X	X	X	X	X	X	X	X	X
EWS			X	X	X	X	X	X	X	X	X	X	X	X
Ultraviolet oxidation system with H2O2														
Ultraviolet oxidation system without H2O2														

Notes:
µg/L = micrograms per liter
ND(x.x) = Not Detected at the reporting limit in parenthesis
TTHM = Total Trihalomethanes = 100 µg/L
NNS = No numeric standard
s.u. = standard units
$\mu S/cm^3$ = microsiemens per centimeters cubed
^oF = degrees Fahrenheit
UJ = The bromomethane and chloromethane data for all samples were qualified as estimated (UJ) due to low percent recovery data for the associated LCS/LCSD samples. The remaining LCS/LCSD sample recovery data were acceptable
pH by Standard Method 4500 H+
Status = Final - data validated by project chemist